#### ADDENDUM NUMBER ONE

#### for

#### SWIM TEAM LOCKER ROOM RENOVATIONS UNIVERSITY OF SOUTH CAROLINA COLUMBIA, SOUTH CAROLINA

#### DATE OF ISSUE: May 8, 2014

#### TO: ALL BIDDERS OF RECORD

This Addendum is issued pursuant to the Conditions of the Contract and is hereby made part of the Contract Documents. The addendum serves to clarify, revise, and supersede information in the Project Manual, the Drawings, and previously issued Addenda. The Bidder shall acknowledge receipt of this Addendum in the appropriate space on the Bid Form. Failure to do so may subject the Bidder to disqualification. A list of attachments, if any, is part of this document.

#### BIDDER SHALL ACKNOWLEDGE RECEIPT OF ADDENDUM IN THE SPACE PROVIDED ON THE BID FORM. FAILURE TO DO SO MAY CONSTITUTE AN INFORMALITY IN THE BID.

#### This addendum consists of <u>2</u> page plus the following attachments:

May 7, 2014 Pre-Bid sign in sheet Section 087100 Door Hardware and Hardware Schedule

#### A. GENERAL:

#### Item No. Description

- 1. See the attached list of attendees from May 7, 2014, Pre-Bid meeting.
- <u>Revision: Base Bid:</u> All toilet partitions and shower partitions shall be Owner furnished, Owner installed. See sheet A3.2, A3.3 and Specification sections 102113 Toilet Compartments and 102116 Shower and Dressing Compartments for full scope of work.
- 3. <u>Revision: Base Bid:</u> Resilient Flooring, RSF-1 and Rubber Base RB-1 at Team Room 136F, Storage 136G, Storage 136H, Vestibule 136J, and Storage 136K shall be Owner Furnished, Owner Installed. General Contractor to prepare all surfaces for installation of new finishes. See sheet A8.1 and Specifications for extent of work.
- 4. <u>Revision: Add Alternate No. 2 to the bid documents.</u> Alt No. 2: All toilet partitions and shower partitions shall be Contractor Furnished, Contractor Installed. See sheet A3.2, A3.3 and Specification sections 102113 Toilet Compartments and 102116 Shower and Dressing Compartments for full scope of work. Resilient Flooring, RSF-1 and Rubber Base RB-1 at Team Room 136F, Storage 136G, Storage 136H, Vestibule 136J, and Storage 136K shall be Contractor Furnished, Contractor installed. See sheet A8.1 and Specifications for full scope of work.
- 5. <u>Clarification: Construction Access</u>: The site will be accessible from both the East and West side of the building. Access from the West shall be from Sumter Street. A vehicular path shall be marked to ensure sprinkler heads and field drainage system are undamaged. The tile pool deck shall be protected throughout

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demolition and construction. The pool deck trench drain shall be covered to prevent debris from entering the drains, pumps, filters, etc. All employee parking shall be in the adjacent lot on the East.

#### B. CHANGES TO TECHNICAL SPECIFICATIONS AND DRAWINGS:

## **SPECIFICATIONS**

 Item No.
 Description

 1.
 Revision: 087100 Door Hardware: Delete Section 087100 Door Hardware and Replace with attached Section 087100 Door Hardware and Hardware Schedule.

#### DRAWINGS

Item No. Description

N/A

## END OF ADDENDUM



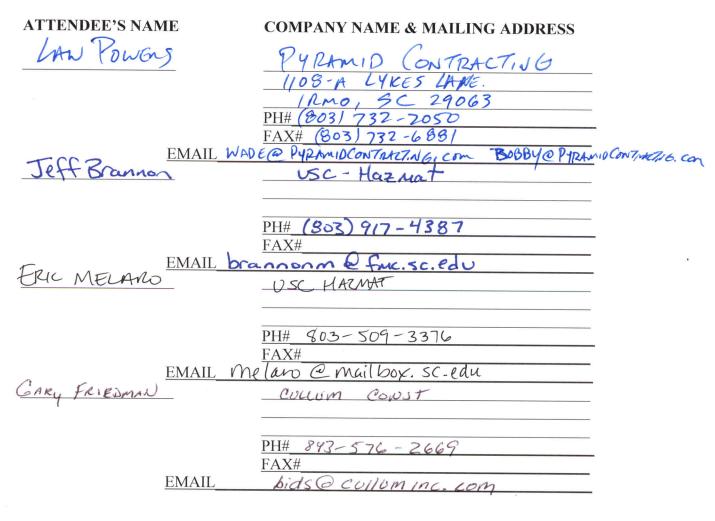
Swim Team Locker Room Renovations Non-Mandatory prebid meeting May 7, 2014 @1:00am at 743 Greene St., Cola, SC 29208

ATTENDEE'S NAME	<b>COMPANY NAME &amp; MAILING ADDRESS</b>
Austin Hood	Hood Construction 1050 shop Road Colo SC 29201
Jim McFarland	PH# FAX# Darla moore @ Hood Construction . com Solid structures 2548 Morningside G. W. Columbia, 3, c. 29869 PH# Gol
Lee Bedenburgh	PH# 926-0298 FAX# 926-0299 jnoah@solidsTructures, 140 Core Construction Po Sox 2150 West Colonsia, 50 29171 PH# 791-8786
Eddie SeasTrunk	FAX# 791-0388 lee e core constructionsc. com Scastrowsk Elect. co. D.C. Box 5483 columbin, 5.C. 29750 PH# 254-8684 FAX#, Secstruck electric eccentring, pet
EMAIL	779-0263

PLEASE PRINT CLEARLY



Swim Team Locker Room Renovations Non-Mandatory prebid meeting May 7, 2014 @1:00am at 743 Greene St., Cola, SC 29208



PLEASE PRINT CLEARLY



## Swim Team Locker Room Renovations Non-Mandatory prebid meeting May 7, 2014 @1:00am at 743 Greene St., Cola, SC 29208

## ATTENDEE'S NAME

## **COMPANY NAME & MAILING ADDRESS**

Lind Jackson	1)SC
Ann Derrick	
Kevin O'Connell	
Jeff DAVIS	<u>PH#</u>
	FAX#
EMAIL EMAIL	
Beck Brantley	Garvin Design Group
	PH#
	<u>FAX#</u>
EMAIL	
	PH#
	<u>FAX</u> #
EMAIL	
	PH#
	<u>FAX</u> #
EMAIL	

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## SECTION 087100

## DOOR HARDWARE

## PART 1 - GENERAL

## 1.01 RELATED DOCUMENTS

A. Drawings and general provisions of Contract, including General and Supplementary Conditions and Division-1 Specification sections, apply to work of this section.

## 1.02 DESCRIPTION OF WORK

- A. Definition: "Finish Hardware" includes items known commercially as finish / security hardware and systems which are required for swing, sliding and folding doors, except special types of unique and non-matching hardware specified in the same section as the door and door frame.
- B. Extent of finish / security hardware required is indicated on drawings and in schedules.
- C. Types of finish hardware required include, but are not limited to, the following:
  - 1. Butt Hinges
  - 3. Lock cylinders and keys
  - 4. Lock and latch sets
  - 6. Pull units/Custom Pulls
  - 7. Closers
  - 9. Door trim units
  - 10. Protection plates
  - 11. Thresholds, Gaskets, and Door Bottoms
  - 12. Key Cabinet

## D. References

- 1. NFPA-80-2007 Standard for Fire Doors and Windows
- 2. NFPA-101- Life Safety Code as adopted.
- 3. ADA The Americans with Disabilities Act Title III Public Accommodations
- 4. ANSI-A 117.1-American National Standards Institute Accessible and Usable Buildings and Facilities
- 5. ANSI-A156.5-American National Standards Institute Auxiliary Locks and Associated Products
- 6. International Building Code as Adopted
- 7. Positive Pressure Testing UL10C & UBC7.2
- 8. UL Underwriters Laboratories
- 9. WHI Warnock Hersey International, Division of Inchscape Testing Services
- 10. State, Local and Federal Codes, National Electrical Building Codes, including the Authority Having Jurisdiction

## 1.04 QUALITY ASSURANCE

- A. Manufacturer: Obtain each type of hardware (ie., lock sets / security equipment) from a single manufacturer, although several may be indicated as offering products complying with requirements.
- B. Supplier: A recognized architectural finish hardware supplier, with warehousing facilities, who has been furnishing hardware and installation in the project's vicinity for a period of not less than 5 years. The supplier shall be, or shall employ, a certified Architectural Hardware Consultant (AHC) who is available, at reasonable times during the course of the work, for consultation about project's hardware requirements, to the Owner, Architect and the Contractor. The certified architectural hardware consultant (AHC) shall prepare all hardware and wiring diagrams. This Supplier is responsible for proper coordination of all finished hardware with related sections to insure compatibility of products. The Hardware Supplier shall attend all coordination meetings regarding hardware applications with related trades.
- C. Fire-Rated Openings: Provide hardware for fire-rated openings in compliance with NFPA Standard No. 80 and local building code requirements. Provide only hardware, which has been tested and listed by UL / WHI or FM for types and sizes of doors required and complies with requirements of door and door frame labels. Provide door seals to meet Positive Pressure Testing UL10C and UBC7 2 as required.
- D. Where emergency exit devices are required on fire-rated doors (with supplementary marking on doors' UL or FM labels indicating "Fire Door to be Equipped with Fire Exit Hardware") provide UL / WHI or FM label on exit devices indicating "Fire Exit Hardware".
- E. Thru bolt door closers and exit devices. Verify and coordinate proper blocking if provided from the door manufacturer for hardware attachment on doors.
- F. Unless otherwise specified, provide lever handle locksets ADA compliant.
- G. Pre-Installation Meeting: The GC shall initiate and conduct a jobsite meeting with the hardware supplier and the Installer, and all related trades for mechanical and electrical hardware. This meeting shall convene at least one month prior to commencement of the related work, specifically, the electrical rough-in for coordination of electrified hardware applications. All approved shop drawings, wiring diagrams, and schedules shall be made available to all related trades as required for work to be performed. The Owner's representative shall attend all pre-install meetings. One month prior to the installation of the hardware, the hardware supplier shall, with the assistance of the manufacturer's representative, provide review/training to the Installers of the following products: closers, exit devices, locks, and electrified hardware.
- H. Existing door/frame conditions: The GC and all related trades shall review the existing conditions prior to ordering and installing any new hardware. Notify the architect of any exceptions. All existing doors scheduled to be re-worked and re-used shall be reviewed with the Finish Hardware Submittal and templates before the doors are prepped for the new hardware and re-hung in the door opening.

## 1.05 SUBMITTALS

A. Product Data: Submit manufacturer's technical product data for each item of hardware in accordance with Division-1 section "Submittals". Include whatever information may be necessary to show compliance with requirements, and include instructions for installation and for maintenance of operating parts and finish.

- B. Hardware Schedule: Submit copies of the schedule in accordance with Division 1 "Submittals", General Requirements. Schedule shall be in vertical format, listing each door opening, including: handing, all hardware scheduled for the opening or otherwise required to allow for proper function of door openings as intended, and the finish of the hardware. At doors with door closers or door controls, include degree of door opening. If requested, all submittals (schedules, cut sheets, diagrams) shall be reviewed by the Owner's representative prior to ordering the material. Submit the schedules and all templates within two (2) weeks from date purchase order is received by the door openings supplier. Furnish wiring diagrams (elevation, riser, and point-to-point) for all electrified hardware.
  - 1. Final Hardware Schedule Content: Based on finish hardware indicated, organize hardware schedule into a vertical format with "hardware sets" indicating complete designations of every item required for each door or opening. Include the following information:
    - a. Type, style, function, size and finish of each hardware item.
    - b. Name and manufacturer of each item.
    - c. Fastenings and other pertinent information.
    - d. Maintain the same Set/Heading numbering from Part 3 of this section, or reference to the Spec Set number in the Heading.
    - e. Reference door numbers from the door/frame schedule in the plan set.
    - f. Explanation of all abbreviations, symbols, codes, etc., contained in schedule.
    - g. Mounting locations for hardware.
    - h. Door and frame sizes and materials.
    - i. Keying information as available.
    - j. One Heading/Set per page
    - 1. Operational Description for all specified electrical hardware shall be included with each Heading/Set.
- C. Submittal Sequence: Submit hardware schedule and wiring diagrams according to the GC's established project schedule, particularly where acceptance of hardware schedule must precede fabrication of other work (e.g., hollow metal frames), and electrical rough-in, which is critical in the project construction schedule. Include with schedule the product data, catalog cuts, samples, templates, shop drawings of other work affected by finish hardware, and other information essential to the coordinated review of hardware schedule.
- D. Keying Schedule: Submit separate detailed schedule after meeting with the Owner to determine the Owner's instructions for keying. When keyed cylinders/cores will be furnished keyed by the Owner, a detailed schedule is not require.
- E. Samples if Requested: Prior to submittal of the final hardware schedule and prior to final ordering of finish hardware, submit any requested samples of type of exposed hardware unit, finished as required, and tagged with full description for coordination with schedule.
- F. Templates: Furnish hardware templates to each fabricator of doors, frames and other work to be factoryprepared for the installation of hardware. Upon request, check shop drawings of such other work, to confirm that adequate provisions are made for proper location, coordination and installation of hardware.
- G. Manufacturer's Catalog Cuts: Submit manufacturer's cut/catalog sheets on all hardware items and any required special mounting instructions with the hardware schedule.
- H. Wiring Diagrams: Provide complete wiring diagrams for each opening requiring electrified hardware. Provide a copy with each hardware schedule submitted after approval. Supply a copy with delivery of hardware to job site and another copy to the Owner at time of job completion. All electrical components shall be listed by opening in the hardware submittals. Include an operational description with each diagram.

- I. Operational Descriptions: Provide a complete operational description of the specified electrified hardware components for each opening, and include the description under the hardware set/heading in the hardware submittal. Operational descriptions shall detail how each electrified component functions within the opening, incorporating all conditions of ingress and egress. Review these descriptions with all related trades at the Pre-Install meetings.
- J. Elevation Drawings: Provide elevation drawings of electronic hardware and systems identifying locations of the system components with respect to their placement in the door opening. Provide a copy with each hardware schedule submitted for approval. Supply another copy to the Owner upon project completion. Include an operational description with each drawing.

#### 1.06 PRODUCT HANDLING

- A. Tag each item or package separately, with identification related to final hardware schedule, and include basic installation instructions with each item or package.
- B. Inventory hardware jointly with the General Contractor, representatives of hardware supplier / hardware installer until each is satisfied that count is correct.
- C. Deliver individually packaged hardware items at the proper times to the proper locations (shop r project site) for installation.
- D. The General Contractor shall provide secure lock-up for hardware and security equipment delivered to the project, but not yet installed. Control handling and installation of hardware items, which are not immediately replaceable, so that completion of the work will not be delayed by hardware losses, both before and after installation.

#### 1.07 SEQUENCING AND SCHEDULING

A. Deliver all finish hardware to the job site in a timely manner so not to delay progress of other trades.

#### 1.08 WARRANTY

- A. All Door closer shall include a ten (10) year manufacturers' warranty against defects in materials and workmanship.
- B. Exit Devices shall include a three (3) year warranty. ADA operators shall include a two (2) year warranty.
- C. Hinges:
  - 1. Life of Building.
  - 2. Electrified Hardware: one (1) year
  - 3. Other Hardware: three (3) years.

#### PART 2 - PRODUCTS

#### 2.01 SCHEDULED HARDWARE

- A. Requirements for design, grade, function, finish, size and other distinctive qualities of each type of finish hardware is indicated in the Finish Hardware Data Sheet and Hardware Schedule at the end of this section. Products are identified by using hardware designation numbers of the following:
- B. Manufacturers:

	Hardware Item:	Specified Manufacturer	Designation
1.	Butts:	Ives	IVE
2.	Continuous Hinges	Ives	IVE

3.	Locksets:	Schlage	SCH
4.	Cylinders/Cores	Best	BES
5.	Silencers:	Ives	IVE
6.	Stops:	Ives	IVE
7.	Overhead Stops	Glynn-Johnson	GLY
8.	Closers:	Norton	NOR
9.	Thresholds:	Zero	ZER
10.	Gasket/Door Bottoms:	Zero	ZER
11.	Kickplates:	Ives	IVE
12.	Pull/Push Plates:	Ives	IVE
13.	Exit Devices:	Von Duprin	VON
14.	Flush Bolts:	Ives	IVE
15.	Automatic Flush Bolts:	Ives	IVE
16.	Miscellaneous Hardware:	Ives, Glynn-Johnson	IVE/GLY
17.	Key Control:	Not Required	

Provide products as hereafter specified. Substitutions other than those manufacturers listed, must be approved, in writing, via addenda, prior to bid. Procedure for substitutions shall be as outlined in Division 1. No substitutions will considered after award of contract.

## 2.02 MATERIALS AND FABRICATION

#### A. General:

- 1. Hand of door: Drawings show direction of slide, swing or hand of each door leaf. Furnish each item of hardware for proper installation and operation of door movement as shown.
- 2. Manufacturer's Name Plate: Do not use manufacturer's products which have manufacturer's name or trade name displayed in a visible location (omit removable nameplates), except in conjunction with required UL labels and as otherwise acceptable to Architect.
- 3. Manufacturer's identification will be permitted on rim of lock cylinders only.
- 4. Finishes:
  - a. 626/652 for all finished metal hardware items except as 630 is otherwise indicated. Door closers to be powder coated to match 652/626. Exit devices shall be US26D with stainless steel touchbars.
- 5. Fasteners: Provide hardware manufactured to conform to published templates, generally prepared for machine screw installation. Do not provide hardware, which has been prepared for self-tapping sheet metal screws, except, as specifically indicated.
- 6. Furnish screws for installation, with each hardware item. Provide Phillips flat-head screws except as otherwise indicated. Finish exposed (exposed under any condition) screws to match hardware finish or, if exposed in surfaces of other work, to match finish of such other work as closely as possible, including "prepared for paint" in surfaces to receive painted finish.
- 7. Provide concealed fasteners for hardware units which are exposed when door is closed, except to extent no standard units of type specified are available with concealed fasteners. Use thru-bolts for closer and exit devices. Coordinate wood door blocking at all wood doors and all fire-rated wood doors. Provide sleeves for each thru-bolt or use sex screw fasteners.
- 8. Tools and Maintenance Instructions for Maintenance: Furnish a complete set of specialized tools and maintenance instructions as needed for Owner's continued adjustment, maintenance, and removal and replacement of finish hardware.

## 2.03 HINGES AND BUTTS

- A. Templates: Except for hinges and pivots to be installed entirely (both leaves) into wood doors and frames, provide only template-produced units.
- B. Screws: Furnish Phillips flat-head or machine screws for installation of units, except furnish Phillips flathead or wood screws for installation of units into wood. Finish screw heads to match surface of hinges or pivots.
- C. Hinge Pins: Except as otherwise indicated, provide hinge pins as follows:
  - 1. Steel Hinges: Steel pins.
  - 2. Non-ferrous Hinges: Stainless steel pins.
  - 3. Exterior Doors: Non-removable pins.
  - 4. Out-swing Corridor Doors: Non-removable pins.
  - 5. Interior Doors: Non-rising pins.
  - 6. Tips: Flat button and matching plug, finished to match leaves.
  - 7. Number of hinges: Provide number of hinges indicated but not less than 3 hinges for door leaf for doors 90" or less in height and one additional hinge for each 30" of additional height.
  - 8. Acceptable Manufacturers:
    - a. Ives 5BB1/5BB1HW.
    - b. Hager: BB1279/BB1191/BB1168/BB1199.
    - c. Bommer: BB5000/BB5002/BB5004/BB5006.

## 2.04 LOCK CYLINDERS AND KEYING

- A. General: The Hardware Supplier shall furnish the keyed permanent cores and keys for the project. The Owner, or the Owner's agent shall install permanent cores and return the construction cores to the Stanley Best Access System factory representative. All permanent keyed cores shall be furnished as Stanley Best Access. Provide permanent keys and cores stamped with the applicable key mark for identification. These visual key control marks or codes shall not include the actual key cuts.
- B. Equip locks and cylinders with 7-pin housings and with construction cores as specified. All cylinder housings shall accept the Best keyed permanent cores. The Hardware Supplier shall confirm all keying and core requirements with the Owner's representative prior to ordering the cores.
- C. Furnish five(5) Construction Keys and one (1) control key for the General Contractor's use during project construction. Furnish temporary construction keyed cores for the construction period of the project. Construction cores shall not be furnished as part of the Owner's existing key system. Furnish five(5) Construction Keys and one (1) control key for the General Contractor's use during project construction.
- D. Equip locks with cylinders that comply with performance requirements for Grade 1 cylinders as listed in ANSI A156, and are UL-listed. All cylinder housings shall be capable of receiving the Owner's keyed permanent cores.

## 2.05 LOCKS, LATCHES AND BOLTS

A. Locksets shall be as specified: Mortise lockset shall be Series 1000, Grade 1 Operational and Security, UL Listed for 3-hour fire door. Strikes: Provide manufacturer's standard wrought box strike for each latch or lock bolt, with ANSI curved lip extended to protect frame, finished to match hardware set. Where specified, provide a replaceable breakaway spindle mechanism residing inside the lock chassis. The lock case shall be full wrapped heavy gauge steel with all metal zinc dichromate plated working parts. Lock case

shall be universal function type and allow for field reversible handing without opening the lock case. Lever rotation shall be in both directions for ease of use, and allow for independent lever rotation.

- 1. Acceptable Manufacturers:
  - a. Schlage L9000 series.
  - b. Best 45H series.
  - c. Corbin-Russwin ML series.
- B. Provide dust-proof strikes for foot bolts, except where special threshold construction provides nonrecessed strike for bolt.
- C. Lock Throw: Provide solid stainless steel 1 <sup>1</sup>/<sub>2</sub>" deadbolt with 1" minimum throw. Comply with UL requirements for throw of bolts and latch bolts on rated fire openings.
- D. Provide 3/4" minimum throw on latch bolts.
- E. Flush Bolt Heads: Minimum of 1/2" diameter rods of brass, bronze or stainless steel, with minimum 12" long rod for doors up to 7'-0" in height. Provide longer rods as necessary for doors exceeding 7'-0" in height.

## 2.06 PULLS/ PUSH PLATES

- A. Exposed Fasteners: Provide manufacturer's standard exposed fasteners for installation; through-bolted for matched pairs, but not for single units. Furnish type and size as specified in Hardware Sets.
- B. Acceptable Manufactures
  - 1. Rockwood
  - 2. Ives
  - 3. Trimco
  - 4. Forms & Surfaces

## 2.07 CLOSERS AND DOOR CONTROL DEVICES

- A. Size of Units: Except as otherwise specifically indicated, comply with the manufacturer's recommendations for size of door control unit, depending upon size of door, exposure to weather and anticipated frequency of use.
- B. Closers: All door closers shall be of one manufacturer to provide for proper installation and servicing after installation. All closers shall be inspected after installation by a factory representative to ensure proper adjustment and operation. A report shall be filed with the architect after said visit has been made. Closer shall carry a manufacturer's TEN YEAR WARRANTY for hydraulic units and 2-year warranty for electrical and/or handicap power assist door closers against manufacturing defects and workmanship. PRV [pressure relief valves ] are not acceptable.
- C. Parallel Arm Closers: Shall incorporate one piece solid forged steel arms with bronze bushings. 1-9/16" x 1/2" steel stud shoulder bolts, shall be incorporated in regular arms, hold open arms, arms with stop built in, arms with hold open and stop built in. All other closers to have forged steel main arms for strength, and durability. Provide extra-duty arms (EDA) at doors scheduled with parallel arm applications.
- D. Built-In Stops: Where closers with built-in positive stops are used, the stops shall be of one piece cast malleable iron material with built in springs. Where required, the hold-open assembly handle for these stops shall rotate on ball bearings.
- E. All door closers shall pass UL10C positive pressure fire test.
- F. Non-sized: All exterior closers shall be non-sized to provide a full range of Size 1 to 5 closing power, and

shall be handed.

- G. Hydraulic Fluid: All closers, with the exception of interior electronic closers, shall utilize temperature stable fluid capable of withstanding temperature ranges of 120 degrees F. to -30F. without requiring seasonal adjustment of closer speed to properly close the door. Fluid shall be nonflammable.
- H. All closers shall have a powder coat finish on closer body, arm, cover and adapter plate. Furnish special rust inhibiting pretreat coating, as specified, for closer body, arm, cover and plates before the powder coat finish.
- I. Provide all drop plates, shoe supports, templates, etc. to properly mount closers according to manufacturers' recommendations.
- J. Acceptable Closer Manufacturers:
  - 1. Norton 7500 series.
  - 2. Corbin-Russwin DC6200/6210 series.
  - 3. LCN 4111/4011.

## 2.09 DOOR TRIM UNITS

- A. Fasteners: Provide manufacturer's standard exposed fasteners for door trim units (kick plates, edge trim, viewers, knockers, mail drops and similar units); either machine screws or self-tapping screws.
- B. Fabricate edge trim of stainless steel, not more than 1/2" nor less than 1/16" smaller in length than door dimension.
- C. Fabricate protection plates (armor, kick or mop) not more than 2" less than door width on stop side and not more than 1" less than door width on pull side, x the height indicated.
- D. Metal Plates: Stainless steel, .050" (U.S. 18 ga.), bevel 3 edges: top and both sides.

## 2.11 THRESHOLDS

- A. General: Except as otherwise indicated provide standard aluminum threshold unit of type, size and profile as shown or scheduled.
- B. Provide thresholds that are 1" wider than depth of frame.
- C. Provide thresholds with return closed ends where specified in Hardware Sets.
- D. Acceptable Manufactures:
  - 1. Zero
  - 2. National Guard
  - 3. Pemko

## 2.12 DOOR SILENCERS

A. All hollow metal frames shall have gray resilient type silencers, unless otherwise specified. Quantity: (3) on single doors and quantity (2) on pair of doors.

## PART 3 - EXECUTION

## 3.01 INSTALLATION

- A. Mount hardware units at heights indicated in "Recommended Locations for Builders Hardware for Standard Steel Doors and Frames" by the Door and Hardware Institute, except as specifically indicated or required to comply with governing regulations, and except as may be otherwise directed by Architect.
- B. Install each hardware item in compliance with the manufacturer's instructions and recommendations. Wherever cutting and fitting is required to install hardware onto or into surfaces, which are later to be painted or finished in another way, coordinate removal, storage and reinstallation or application of surface protections with finishing work specified in the Division-9 sections. Do not install surface-mounted items until finishes have been completed on the substrate.
- C. Set units level, plumb and true to line and location. Adjust and reinforce the attachment substrate as necessary for proper installation and operation.
- D. Drill and countersink units, which are not factory-prepared for anchorage fasteners. Space fasteners and anchors in accordance with industry standards.
- E. Set thresholds for exterior doors in full bed of butyl-rubber or polyisobutylene mastic sealant.
- F. Adjust and reinforce attachment substrate for proper installation and operation:1. Gaskets: install jamb-applied gaskets before closers, overhead stops, rim strikes, etc.
- G. Locate floor stops not more than 4 inches from the wall.
- H. Verify actual locations of wiring connections before electrified door hardware is installed.
- I. Examine doors and frames with the hardware installer for compliance with requirements for installation tolerances, labeled fire door assembly, wall and floor construction, and other conditions affecting door performance.
- J. Existing door/frame conditions: The GC and all related trades shall review the existing conditions prior to ordering and installing any new hardware. Notify the architect of any exceptions. All existing doors scheduled to be re-worked and re-used shall be reviewed with the Finish Hardware Submittal and templates before the doors are prepped for the new hardware and re-hung in the door opening.

## 3.02 ADJUST AND CLEAN

- A. Adjust and check each operating item of hardware and each door, to ensure proper operation or function of every unit. Replace units, which cannot be adjusted to operate freely and smoothly as intended for the application made.
- B. Clean adjacent surfaces soiled by hardware installation.
- C. Final Adjustment: Wherever hardware installation is made more than one month prior to acceptance or occupancy of a space or area, return to the work during the week prior to acceptance or occupancy, and make final check and adjustment of all hardware items in such space or area. Clean operating items as necessary to restore proper function and finish of hardware and doors. Adjust door control devices to compensate for final operation of heating and ventilating equipment.
- D. Instruct Owner's Personnel in proper adjustment and maintenance of hardware and hardware finishes, during the final adjustment of hardware.
- E. Continued Maintenance Service: Approximately six months after the acceptance of hardware in each area,

the Installer, accompanied by the representative[s] of the Finish Hardware manufacturer[s], shall return to the project and re-adjust every item of hardware to restore proper function of doors and hardware. Consult with and instruct Owner's personnel in recommended additions to the maintenance procedures. Replace hardware items, which have deteriorated or failed due to faulty design, materials or installation of hardware units. Prepare a written report of any current or predictable problems (of substantial nature) in the performance of the hardware and furnish copy to Owners Agent / Representative.

3.03 SCHEDULE

#### HARDWARE SET NO. 01

# FOR USE ON MARK/DOOR #(S): 127CA

EACH TO HAVE:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH MFR
3 1 1 1	EA EA EA EA	HINGE CLASSROOM LOCK PERMANENT CORE SURFACE CLOSER	5BB1 4.5 X 4.5 L9070HD 17A BEST KEYED 4011 TB	652         IVE           626         SCH           626         BES           689         LCN
1 1 3	EA EA EA	KICK PLATE WALL STOP SILENCER	8400 8" X 2" LDW WS406/407CVX SR64	630 IVE 630 IVE GRY IVE

HARDWARE SET NO. 02

FOR USE ON MARK/DOOR #(S): 127CB 136AA

## EACH TO HAVE:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH MFR	
3	EA	HINGE	5BB1 4.5 X 4.5	630	IVE
1	EA	DORM/BEDROOM W/DB	L9473HD 17A	630	SCH
1	EA	PERMANENT CORE	BEST KEYED	626	BES
1	EA	SURFACE CLOSER	4111 SCUSH	689	LCN
			SRI X TB		
1	EA	KICK PLATE	8400 8" X 2" LDW	630	IVE
3	EA	SILENCER	SR64	GRY	IVE

HARDWARE SET NO. 03

FOR USE ON MARK/DOOR #(S): 127DA

EACH	EACH TO HAVE:					
QTY		DESCRIPTION	CATALOG NUMBER	FINISH MFR		
3	EA	HINGE	5BB1 4.5 X 4.5	630	IVE	
1	EA	PRIVACY LOCK	L9040 17A L583-363	630	SCH	
1	EA	WALL STOP	WS406/407CVX	630	IVE	
1	EA	COAT AND HAT HOOK	582	626	IVE	
3	EA	SILENCER	SR64	GRY	IVE	

HARDWARE SET NO. 04

FOR USE ON MARK/DOOR #(S): 127EA 136KA

EACH TO HAVE:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH MFR
3	EA	HINGE	5BB1 4.5 X 4.5	630 IVE
1	EA	STOREROOM LOCK	L9080HD 17A	630 SCH
1	EA	PERMANENT CORE	BEST KEYED	626 BES
1	EA	WALL STOP	WS406/407CVX	630 IVE
3	EA	SILENCER	SR64	GRY IVE

HARDWARE SET NO. 05

FOR USE ON MARK/DOOR #(S): 136FA

EACH TO HAVE:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH MFR	
3	EA	HINGE	5BB1 4.5 X 4.5 NRP	630	IVE
1	EA	ELEC CLASSROOM LOCK	CO-100-MS-70-KP-SPA-BD	626	SCE
1	EA	PERMANENT CORE	BEST KEYED	626	BES
1	EA	SURFACE CLOSER	4111 EDA SRI X TB	689	LCN
1	EA	KICK PLATE	8400 8" X 2" LDW	630	IVE
1	EA	WALL STOP	WS406/407CVX	630	IVE
1	SET	SEALS	5050CL	CLR	NGP
3	EA	SILENCER	SR64	GRY	IVE

HARDWARE SET NO. 06

FOR USE ON MARK/DOOR #(S): 136FB

EACH TO HAVE:					
QTY	DESCRIPTION	CATALOG NUMBER	FINISH	MFR	

3	EA	HINGE	5BB1 4.5 X 4.5	630	IVE
1	EA	ELEC CLASSROOM LOCK	CO-100-MS-70-KP-SPA-BD	626	SCE
1	EA	PERMANENT CORE	BEST KEYED	626	BES
1	EA	SURFACE CLOSER	4011	689	LCN
1	EA	KICK PLATE	8400 8" X 2" LDW	630	IVE
1	SET	SEALS	5050CL	CLR	NGP
3	EA	SILENCER	SR64	GRY	IVE

OPERATIONAL DESCRIPTION

## HARDWARE SET NO. 07

FOR USE ON MARK/DOOR #(S): 136JA

## EACH TO HAVE:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH MFR	
3	EA	HINGE	5BB1 4.5 X 4.5 NRP	630	IVE
1	EA	ELEC CLASSROOM LOCH		626	SCE
1	EA	PERMANENT CORE	BEST KEYED	626	BES
1	EA	SURFACE CLOSER	4111 EDA SRI X TB	689	LCN
1	EA	KICK PLATE	8400 8" X 2" LDW	630	IVE
1	EA	WALL STOP	WS406/407CVX	630	IVE
3	EA	SILENCER	SR64	GRY	IVE

## HARDWARE SET NO. 08

FOR USE ON MARK/DOOR #(S): 136HA

## EACH TO HAVE:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH MFR
3	EA	HINGE	5BB1 4.5 X 4.5	652 IVE
1	EA	CLASSROOM LOCK	L9070HD 17A	626 SCH
1	EA	PERMANENT CORE	BEST KEYED	626 BES
1	EA	OH STOP	90S	630 GLY
3	EA	SILENCER	SR64	GRY IVE

## HARDWARE SET NO. 09

## FOR USE ON MARK/DOOR #(S): 133BA

## EACH TO HAVE:

QTY	DESCRIPTION	CATALOG NUMBER	FINISH	MFR

3 1 1 1	EA EA EA EA	HINGE STOREROOM LOCK PERMANENT CORE SURFACE CLOSER	5BB1 4.5 X 4.5 NRP L9080HD 17A BEST KEYED 4111 EDA TB	630 626 626 689	IVE SCH BES LCN
1	EA	KICK PLATE	8400 8" X 2" LDW	630	IVE
3	EA	SILENCER	SR64	GRY	IVE

## HARDWARE SET NO. 10

FOR USE ON MARK/DOOR #(S): 133A 133AA

## EACH TO HAVE:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH MFR
3	EA	HINGE	5BB1 4.5 X 4.5	630 IVE
1	EA	STOREROOM LOCK	L9080HD 17A	630 SCH
1	EA	PERMANENT CORE	BEST KEYED	626 BES
1	EA	SURFACE CLOSER	4011	689 LCN
1	EA	KICK PLATE	8400 8" X 2" LDW	630 IVE
1	EA	WALL STOP	WS406/407CVX	630 IVE
3	EA	SILENCER	SR64	GRY IVE

## END OF SECTION 087100