



LONG BEACH COMMUNITY COLLEGE DISTRICT  
CONTRACTS MANAGEMENT DEPARTMENT  
4901 EAST CARSON STREET  
LONG BEACH, CA 90808  
Ph. (562) 938-4843

BID 22-002 LAC CAMPUS WIDE ADA BUILDING BARRIER PROJECT  
AT THE  
LIBERAL ARTS CAMPUS

ADDENDUM NO. 2

March 30, 2022

This Addendum forms a part of the Contract Documents and modifies the original Contract Documents. Acknowledge receipt of the Addendum on Section 1.2 of the Bid Proposal. Failure to do so may result in the bid being deemed non-responsive.

**Note:** It is the responsibility of all bidders to notify all subcontractors from whom they request bids and from whom they accept bids of all changes contained in this addendum.

ADDENDUM NO. 2 CONTENTS

- I. CHANGES TO INSTRUCTIONS TO BIDDERS
  - a. SECTION 15.4 – DETERMINATION OF LOWEST RESPONSIVE BID.
    - i. REVISED PAGE 13 – INSTRUCTIONS TO BIDDERS
  - b. SECTION 15.7 – UNIT PRICE ITEMS
    - i. REVISED ATTACHMENT “A” – COMPOSITE UNIT PRICE BID PROPOSAL
- II. PRE-BIDS INQUIRIES (PBI’s) AND RESPONSES
- III. SPECIFICATION REVISIONS
- IV. ADDENDUM ATTACHMENTS

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I. CHANGES TO INSTRUCTIONS TO BIDDERS

- 1. Refer to Revised Page 13 of Instructions for Bidders
  - a. **The Determination of Lowest Responsive Bid.** The lowest responsive bid for the Work shall be determined as follows:
    - i. Base Contract **Including** Unit Pricing.
- 2. Refer to the Revised Attachment “A” – Composite Unit Price Bid Proposal
  - a. This form is now **Applicable.**
  - b. Bidders shall provide a Unit Price per the revised Spec Section 087100 (Door Hardware) part of Addendum #2. Provide a unit cost for Hardware Group No. 05 thru Hardware Group No. 46 (ONLY)
  - c. The lowest bid shall be the lowest bid price on the base contract **including** unit price items.

## II. PRE-BIDS INQUIRIES (PBI's) AND RESPONSES

### 1. Q: Are all workers for this project required to provide proof of Covid vaccination?

*A: Contractors are responsible for construction site safety and are responsible for complying with Cal-OSHA and Long Beach Health Department Orders. The General Contractor/ Prime Contractor shall establish via their Illness Injury Prevention Plan (IIPP) their safety protocols for construction activities and for Covid-19 protocols. The General Contractor / Prime Contractor will submit the IIPP to the Construction Manager for review prior to starting any work on campus.*

*As the District has adopted a vaccination mandate for all students, faculty and staff members - All work must be performed behind temporary barriers to separate contractors from students, faculty and staff. These barriers may include caution tape, traffic cones with signage, a-frame barricades, fencing and other temporary barriers to be approved by the Construction Manager. All workers must wear a mask indoors at all times within District Buildings to follow District protocols*

*Contractors will need to be escorted into to their area of work by a BMT member in order to obtain clearance from Building Monitors checking visitor's vaccination clearances.*

*In addition, BMT will distribute badges to the Contractors to be worn at all times while on campus.*

*For visitors: Please refer to the following link for the latest updates <https://www.lbcc.edu/return-campus>*

### 2. Q: Do subcontractors need a pre-qual with District for this project?

*A: All contractors/subcontractors must be registered with Department of Industrial Relations (DIR) Pursuant to Labor Code §1725.5. each Contractor and all subcontractors identified in a Contractor's subcontractors' list, submitting a proposal to complete the work, labor, materials and/or services must be a Department of Industrial Relations Registered Contractor. A bidder who is not a DIR Registered Contractor when submitting a proposal for the work is deemed "not qualified" and the proposal of such a bidder will be rejected for non-responsiveness. Information regarding the DIR can be found at: <http://www.dir.ca.gov/Public-Works/PublicWorks.html>.*

*The subcontractors do not need to be pre-qualified with the District for this project.*

### 3. Q: Is there any hazardous material? example, for floor tile, floor tile glue, lead paint in ceramic wall tile, grout, painted surfaces. Is there an abatement report?

*A: No hazardous materials, each building has been surveyed and all abatement has been done under a different project.*

### 4. Q: Several of the plan sheets have clouded areas in the notes, with #1. Does the clouded notes area identify the only scope of work that is to be performed on that plan sheet? Or are the non-clouded notes part of the scope as well?

*A: All parts of the drawings both clouded and unclouded are a part of the project scope.*

5. **Q: There are several restroom accessories that are being reinstalled at different heights, example, paper towel dispenser, toilet paper dispenser, seat cover dispensers, etc. Do all these items need new backing in the walls to reinstall? If so, then are all affected tile pieces to be replaced with new tile?**

*A: Yes, reference Sheet 0.0: Contractor shall provide backing per General Note 2, and affected tile replaced (to match existing) per General Note 13.*

6. **Q: Plan sheet note 05-1F states to adjust height of (E) defibrillator. Will reinstallation need new backing/ blocking inside wall? If so, what is the finish on the wall? Do these walls have insulation? Is there a detail for wall interior backing/blocking?**

*A: Yes, reference Sheet 0.0: Contractor shall provide backing per General Note 2. Existing wall finish to be repaired is painted gypsum board. Contractor shall assume walls have insulation. General Note 2 references backing detail 1/0.9.*

7. **Q: Note 1 on plan sheet states to patch and repair to match. Do we patch holes in tile? Or replace tile pieces completely? What if tile color is not available?**

*A: No, tiles shall be replaced entirely to match. If tiles are demonstrated to be unavailable, alternate color shall be chosen from the full spectrum of available colors by Architect and District from a manufacturer matching existing tile thickness, size and sheen.*

8. **Q: Plan sheet General Note 3. states to paint entire wall from nearest corner to corner... This note is not clouded. Is it part of the scope or not part of the scope?**

*A: All parts of the drawings both clouded and unclouded are a part of the project scope.*

9. **Q: Plans mention to install temporary fencing as needed for workspace. Can 6' temp panels on stands be used? Will security screening be required?**

*A: Temporary fencing/barriers to be reviewed and approved by the District through submittal of a Site Plan. Refer to General Conditions 17.21.2 and Spec Section 015000.*

10. **Q: This project will be conducted with four Phases. A Phasing Plan is required. Is this Phasing Plan to be submitted via a Primavera schedule?**

*A: Yes, refer to Spec Section 013300.*

11. **Q: Is there Fire Alarm in the scope of work?**

*A: No, Fire Alarm scope.*

**12. Q: The Bid Forms identify a Unit Price and Alternative Bid Price sheets. We want to confirm these sheets are Not Applicable to this project.**

*A: Unit Price sheets are to be utilized per Addendum 1.*

**13. Q: Some of the slides in the slide presentation green highlighted areas on the plan sheets. These do not match the drawing plan sheets. Does the green highlighted identify the scope of work on those plan sheets? What plan sheets should contractor follow for the scope of work?**

*A: Contractor shall complete all work identified in Construction Drawings. The slides were for reference only.*

**14. Q: Plan sheet detail 4 notes to re-route gas line to new location. Is there a detail as to how contractor is to re-route? Are we cutting into the floor, is it surface mounted on desk cabinet?**

*A: Piping must be routed within millwork and millwork repaired. Piping and conduit cannot be visible nor ADA clearances be infringed upon.*

**15. Q: Plan sheet detail 3 has clouded area stating Existing Backing and Cabinet to Remain. There are several locations where new cabinets are to be installed. Does the contractor install new backing for all cabinets or use existing?**

*A: Subject detail is applicable where referenced for existing cabinets to remain. Contractor shall install new backing for all new cabinets per details 10, 21, and 27/0.11*

**16. Q: Plan sheet detail for signs shows signs to be installed with tape and silicone adhesive. Is this the case for all signs? If the signs need to be at new height, yet sign covers up old height attachment, does the contractor need to patch and paint old attachment? Do we need to paint walls corner to corner at all sign locations?**

*A: Yes, tape and silicone adhesive shall be used. Old attachment holes and damage to finishes shall be repaired, primed, and painted, typical. Contractor shall assume that walls where new paint is visible shall be repainted, corner to corner*

**17. Q: Keynote plan sheet has several items clouded, and several items not clouded. Please clarify what is in the scope of work in the keynotes and other plan sheets with clouded items.**

*A: All parts of the drawings both clouded and unclouded are a part of the project scope.*

**18. Q: Plan sheet detail 28 shows entire height of wall for a single conduit outlet or electrical switch to be removed, including base board. This is extreme and costly. Can the drywall surrounding the outlet or light switch be replaced only and not the entire 32” wall from ceiling to flooring? Also, it is unknown in buildings not walked if there’s existing tackboards, posters, etc. on walls, that would need to be removed prior to any work.**

*A: Contractor shall bid with the assumption that Detail 28 shall be utilized for all electrical outlet and switch relocations. Existing wall appurtenances (such as tackboards, posters, etc on wall surfaces that will be demolished) shall be carefully removed and rendered back to the District. Surrounding wall appurtenances shall be protected in place.*

**19. Q: Does the School District have elevator consultant?**

*A: Yes, please contact Tom Bertsch with Amtech Elevators – (844)258-1523.*

### **III. SPECIFICATION REVISIONS**

*1. Spec Section 087100 (Door Hardware) – replace in its entirety. Refer to the revised Door Hardware Designation, this shall supersede the previous designation.*

### **IV. ADDENDUM ATTACHMENTS**

- 1. Revised Page 13 – Instructions for Bidders.*
- 2. Revised Attachment “A” – Composite Unit Price Bid Proposal.*
- 3. Spec Sections 087100*
- 4. Revised Hardware Designation*

**\*\*\*END OF ADDENDUM NO. 2\*\*\***

### **LONG BEACH COMMUNITY COLLEGE DISTRICT**



**Erica Bonilla**  
**Deputy Director, Purchasing & Contracts**

**ADDENDUM ATTACHMENT 1**

**REVISED**

**Page 13 of Instructions for Bidders**  
*(next page)*

- 13.3.2. Injury and Illness Prevention Program (“IIPP”). The Bidder and all listed Subcontractors of the Bidder shall have a current IIPP conforming to Labor Code §3201.5 or Labor Code §6401.7. Only the Bidder's Table of Contents for its IIPP must be submitted at time of bid.
- 13.3.3. Workers Compensation Insurance EMR. The Bidder shall have an average Workers' Compensation Experience Modification Rate (EMR) of 1.25 or less over the last five (5) years.
- 13.4. District Verification of Compliance with Minimum OCIP Requirements. The District will verify compliance with Minimum OCIP Requirements, including the EMR of Bidders. Any information found to be incorrect or untrue shall render Bidder's Bid Proposal non-responsive.
14. Workers' Compensation Insurance. Pursuant to California Labor Code §3700, the successful Bidder shall secure Workers' Compensation Insurance for its employees engaged in the Work of the Contract. The successful Bidder shall execute and deliver to the District the form of Workers Compensation Certification included in the Contract Documents concurrently with such Bidder's delivery of the executed Agreement to the District.
15. Determination of Lowest Responsive Bid/Award of Contract.
- 15.1. Waiver of Irregularities or Informalities. The District reserves the right to reject any and all Bid Proposals or to waive any irregularities or informalities in any Bid Proposal or in the bidding.
- 15.2. Award to Lowest Responsive Responsible Bidder. The award of the Contract for each Bid Package, if made by the District through action of its Board of Trustees, will be to the responsible Bidder submitting the lowest priced responsive Bid Proposal on the basis of the Base Bid Proposal or the Base Bid Proposal and Alternate Bid Items, if any, selected in accordance with these Instructions for Bidders.
- 15.3. Alternate Bid Items Proposal. **If the bidding includes Alternate Bid Items, the price(s)** proposed by a Bidder for each Alternate Bid Item shall be set forth in the form of Alternate Bid Items Proposal, included as Attachment A to the form of Bid Proposal. Each Bidder shall submit its completed and executed form of Alternate Bid Items Proposal concurrently with submission of the Bidder's Bid Proposal, provided that the page(s) forming the Alternate Bid Items Proposal shall be submitted by each Bidder in a separate electronic file titled “ALTERNATE BID ITEMS PROPOSAL.” **The Bid Proposal of a Bidder will be rejected for non-responsiveness if the Bidder fails to: (i) propose prices for each Alternate Bid Item on the form Alternate Bid Items Proposal; and (ii) submit the completed/executed form of Alternate Bid Items Proposal concurrently with submission of the Bid Proposal.**
- 15.4. Determination of Lowest Responsive Bid. The lowest responsive bid for the Work shall be determined as follows:
- Base Contract Only**. The lowest bid shall be the lowest bid price on the base contract without consideration of the prices on the additive or deductive alternate items.
  - Base Contract Including Unit Pricing**. The lowest bid shall be the lowest bid price on the base contract ***including*** unit price items but without consideration of the prices on the additive or deductive alternate items.
  - Base Contract Plus Designated Alternates**. The lowest bid shall be the lowest total of the bid prices on the base contract and those additive or deductive alternate items that are specifically identified herein as being used for the purpose of determining the lowest bid price and include Alternates: \_\_\_\_\_.

**ADDENDUM ATTACHMENT 2**

**REVISED**

**Attachment "A" – Composite Unit Price Bid Proposal**  
*(next page)*



**REVISED  
ATTACHMENT A  
COMPOSITE UNIT PRICE BID PROPOSAL**

**Project: BID 22-002 LAC CAMPUS-WIDE ADA BUILDING BARRIER REMOVAL PROJECT**

The Bidders shall provide a Composite Unit Price Proposal by completing this Attachment A fully and completely, and shall insert the amount of said Composite Unit Price Proposal in the Bid Proposal Amount at Paragraph 1.1 of this Bid Proposal; a Bidder’s failure to do so will result in rejection of the Bid Proposal for non- responsiveness.

During performance of the Work, the District may elect to add or delete any Unit Price Item set forth below. The Unit Price shall be the total cost for addition or deletion of the item, inclusive of all costs of labor, materials, equipment and services necessary to complete the Unit Price work, together with any and all indirect costs, overhead and profit. No additional mark-up shall be allowed on any Unit Price Item. If the District elects to add or delete any Unit Price Item set forth below, the debit or credit for such Unit Price Item shall be in accordance with the Unit Prices set forth below.

The Multiplier set forth below for each Unit Price Item is **not** an estimate of the number of units required for the Work. The Multiplier set forth below for each Unit Price Item is to be used solely for the purpose of calculating a Composite Unit Price Proposal. During the Project, the District reserves the right to add or delete any multiplier of any Unit Price Item set forth below. If the District elects to add or delete any Unit Price Item set forth below, the debit or credit for such Unit Price Item shall be in accordance with the Unit Prices set forth below.

Bidders shall insert a Unit Price in the table below for each Unit Price Item. To compute a Unit Price Proposal for a Unit Price Item, multiply the Unit Price by the Multiplier for that Unit Price Item.

	UNIT PRICE ITEM	UNIT PRICE	UNIT	MULTIPLIER	UNIT PRICE PROPOSAL
1.	Hardware Group #5	\$			\$
2.	Hardware Group #6	\$			\$
3.	Hardware Group #7	\$			\$
4.	Hardware Group #8	\$			\$
5.	Hardware Group #9	\$			\$
6.	Hardware Group #10	\$			\$
7.	Hardware Group #11	\$			\$
8.	Hardware Group #12	\$			\$
9.	Hardware Group #13	\$			\$
10.	Hardware Group #14	\$			\$
11.	Hardware Group #15	\$			\$
12.	Hardware Group #16	\$			\$
13.	Hardware Group #17	\$			\$
14.	Hardware Group #18	\$			\$
15.	Hardware Group #19	\$			\$

**(cont'd on next page)**

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	UNIT PRICE ITEM	UNIT PRICE	UNIT	MULTIPLIER	UNIT PRICE PROPOSAL
16.	Hardware Group #20	\$			\$
17.	Hardware Group #21	\$			\$
18.	Hardware Group #22	\$			\$
19.	Hardware Group #23	\$			\$
20.	Hardware Group #24	\$			\$
21.	Hardware Group #25	\$			\$
22.	Hardware Group #26	\$			\$
23.	Hardware Group #27	\$			\$
24.	Hardware Group #28	\$			\$
25.	Hardware Group #29	\$			\$
26.	Hardware Group #30	\$			\$
27.	Hardware Group #31	\$			\$
28.	Hardware Group #32	\$			\$
29.	Hardware Group #33	\$			\$
30.	Hardware Group #34	\$			\$
31.	Hardware Group #35	\$			\$
32.	Hardware Group #36	\$			\$
33.	Hardware Group #37	\$			\$
34.	Hardware Group #38	\$			\$
35.	Hardware Group #39	\$			\$
36.	Hardware Group #40	\$			\$
37.	Hardware Group #41	\$			\$
38.	Hardware Group #42	\$			\$
39.	Hardware Group #43	\$			\$
40.	Hardware Group #44	\$			\$
41.	Hardware Group #45	\$			\$
42.	Hardware Group #46	\$			\$
<b>TOTAL</b>					\$

Said Total is Bidder's Composite Unit Price Proposal.

Bidder shall include its Composite Unit Price Proposal in the Bid Proposal Price at Paragraph 1.1 of this Bid Proposal.

[END OF ATTACHMENT A]

**ADDENDUM ATTACHMENT 3**

**REVISED**

**Spec Sections 087100 – Door Hardware**

(next page)

## SECTION 08 71 00 - DOOR HARDWARE

### PART 1 - GENERAL

#### 1.1 SUMMARY

A. Section Includes:

1. Door hardware, including electric hardware.
2. Storefront and entrance door hardware.
3. Gate Hardware.
4. Third-party inspection report for fire-rated door assemblies.
5. Battery-powered electronic credential access control locks and panic hardware lever trim.
6. Impact system frame/door/hardware assembly.
7. Card Access control system.
8. Hand-key biometric access control devices.
9. Hold-open closers with fire-alarm interface.
10. Wall or floor-mounted electromagnetic hold-open devices.
11. Power supplies for electric hardware.
12. Low energy door operators plus sensors and actuators.
13. Remote button release hardware.
14. Door position switches.
15. Cabinet locks.
16. Padlocks.
17. Cylinders for doors fabricated with locking hardware.
18. Stainless steel guard rails between pairs of exterior doors.
19. Point-to-point wiring diagrams for electric hardware.
20. Key cabinets.
21. Key management software.

B. Related Divisions:

1. Division 06 – door hardware installation
2. Division 07 – sealant at exterior thresholds
3. Division 08 – metal doors and frames, interior aluminum frames, wood doors, integrated security systems, specialty doors, storefront and glazed curtainwall systems.
4. Division 10 – operable partitions
5. Division 21 – fire and life safety systems
6. Division 28 – security access systems

C. Specific Omissions: Hardware for the following is specified or indicated elsewhere.

1. Windows.
2. Cabinets, including open wall shelving and locks.
3. Signs, except where scheduled.
4. Toilet accessories, including grab bars.
5. Installation.
6. Rough hardware.
7. Conduit, junction boxes & wiring.

8. Folding partitions, except cylinders where detailed.
9. Sliding aluminum doors, except cylinders where detailed.
10. Access doors and panels, except cylinders where detailed.
11. Corner Guards.
12. Welded steel gates and supports.

## 1.2 REFERENCES:

- A. Use date of standard in effect as of Bid date.
1. American National Standards Institute
    - a) ANSI 156.18 – Materials and Finishes.
    - b) ICC/ANSI A117.1 - 2009 – Specifications for making buildings and facilities usable by physically handicapped people. [omit for CA work – not applicable]
  2. BHMA – Builders Hardware Manufacturers Association
  3. 2019 California Building Code
    - a) Chapter 11B – Accessibility To Public Buildings, Public Accommodations, Commercial Buildings and Public Housing
  4. DHI – Door and Hardware Institute
  5. NFPA – National Fire Protection Association
    - a) NFPA 80 2016 Edition – Standard for Fire Doors and Other Opening Protectives.
    - b) NFPA 105 – Smoke and Draft Control Door Assemblies
    - c) NFPA 252 – Fire Tests of Door Assemblies
  6. UL – Underwriters Laboratories
    - a) UL10C – Positive Pressure Fire Tests of Door Assemblies.
    - b) UL 305 – Panic Hardware
  7. WHI – Warnock Hersey Incorporated State of California Building Code
  8. Local applicable codes
  9. SDI – Steel Door Institute
  10. WI – Woodwork Institute
  11. AWI – Architectural Woodwork Institute
  12. NAAMM – National Association of Architectural Metal Manufacturers
- B. Abbreviations
1. Manufacturers: see table at 2.1.A of this section
  2. Finishes: see 2.7 of this section.

## 1.3 SUBMITTALS & SUBSTITUTIONS

- A. SUBMITTALS: Submit six copies of schedule per D. Only submittals printed one sided will be accepted and reviewed. Organize vertically formatted schedule into “Hardware Sets” with index of doors and headings, indicating complete designations of every item required for each door or opening. Minimum 10pt font size. Include following information:
1. Type, style, function, size, quantity and finish of hardware items.

2. Use BHMA Finish codes per ANSI A156.18.
  3. Name, part number and manufacturer of each item.
  4. Fastenings and other pertinent information.
  5. Location of hardware set coordinated with floor plans and door schedule.
  6. Explanation of abbreviations, symbols, and codes contained in schedule.
  7. Mounting locations for hardware.
  8. Door and frame sizes, materials and degrees of swing.
  9. List of manufacturers used and their nearest representative with address and phone number.
  10. Catalog cuts.
  11. Point-to-point wiring diagrams.
  12. Manufacturer's technical data and installation instructions for electronic hardware.
- B. Bid and submit manufacturer's updated/improved item if scheduled item is discontinued.
- C. Deviations: Highlight, encircle or otherwise identify deviations from "Schedule of Finish Hardware" on submittal with notations clearly designating those portions as deviating from this section.
- D. If discrepancy between drawings and scheduled material in this section, bid the more expensive of the two choices, note the discrepancy in the submittal and request direction from Architect for resolution.
- E. Substitutions per Division 1. Include product data and indicate benefit to the Project. Furnish operating samples on request.
- F. Items listed with no substitute manufacturers have been requested by Owner to meet existing standard.
- G. Furnish as-built/as-installed schedule with closeout documents, including keying schedule, riser and point-to-point wiring diagrams, manufacturers' installation, adjustment and maintenance information, and supplier's final inspection report.
- H. Prior to submittal, carefully inspect existing conditions to verify finish hardware required to complete Work, including sizes, quantities, existing hardware scheduled for re-use, and sill condition material. If conflict between the specified/scheduled hardware and existing conditions, submit request for direction from Architect. Include date of jobsite visit in the submittal.
1. Submittals prepared without thorough jobsite visit by qualified hardware expert will be rejected as non-compliant.

#### 1.4 QUALITY ASSURANCE:

- A. Qualifications:
1. Hardware supplier: direct factory contract supplier who employs a certified architectural hardware consultant (AHC), available at reasonable times during course of work for project hardware consultation to Owner, Architect and Contractor.
    - a) Responsible for detailing, scheduling and ordering of finish hardware. Detailing implies that the submitted schedule of hardware is correct and complete for the intended function and performance of the openings.

- B. Hardware: Free of defects, blemishes and excessive play. Obtain each kind of hardware (latch and locksets, exit devices, hinges and closers) from one manufacturer.
- C. Exit Doors: Operable from inside with single motion without the use of a key or special knowledge or effort.
- D. Fire-Rated Openings: NFPA 80 compliant. Hardware UL10C (positive pressure) compliant for given type/size opening and degree of label. Provide proper latching hardware, non-flaming door closers, approved-bearing hinges, and resilient seals. Coordinate with wood door section for required intumescent seals. Furnish openings complete.
- E. Furnish hardware items required to complete the work in accordance with specified performance level and design intent, complying with manufacturers' instructions and code requirements.

#### 1.5 DELIVERY, STORAGE AND HANDLING:

- A. Delivery: coordinate delivery to appropriate locations (shop or field).
  - 1. Permanent keys and cores: secured delivery direct to Owner's representative.
- B. Acceptance at Site: Items individually packaged in manufacturers' original containers, complete with proper fasteners and related pieces. Clearly mark packages to indicate contents, locations in hardware schedule and door numbers.
- C. Storage: Provide securely locked storage area for hardware, protect from moisture, sunlight, paint, chemicals, dust, excessive heat and cold, etc.

#### 1.6 PROJECT CONDITIONS AND COORDINATION:

- A. Where exact types of hardware specified are not adaptable to finished shape or size of members requiring hardware, provide suitable types having as nearly as practical the same operation and quality as type specified, subject to Architect's approval.
- B. Coordination: Coordinate hardware with other work. Furnish hardware items of proper design for use on doors and frames of the thickness, profile, swing, security and similar requirements indicated, as necessary for proper installation and function, regardless of omissions or conflicts in the information on the Contract Documents. Furnish related trades with the following information:
  - 1. Location of embedded and attached items to concrete.
  - 2. Location of wall-mounted hardware, including wall stops.
  - 3. Location of finish floor materials and floor-mounted hardware.
  - 4. At masonry construction, coordinate with the anchoring and hollow metal supplier prior to frame installation by placing a strip of insulation, wood, or foam, on the back of the hollow metal frame behind the rabbet section for continuous hinges, as well as at rim panic hardware strike locations, silencers, coordinators, and door closer arm locations. When the frame is grouted in place, the backing will allow drilling and tapping without dulling or breaking the installer's bits.
  - 5. Locations for conduit and raceways as needed for electrical, electronic and electro-pneumatic hardware items. Fire/life-safety system

- interfacing. Point-to-point wiring diagrams plus riser diagrams to related trades.
- 6. Coordinate: low-voltage power supply locations.
- 7. Coordinate: back-up power for doors with automatic operators.
- 8. Coordinate: flush top rails of doors at outswinging exteriors, and throughout where adhesive-mounted seals occur.
- 9. Manufacturers' templates to door and frame fabricators.
- C. Check Shop Drawings for doors and entrances to confirm that adequate provisions will be made for proper hardware installation.
- D. Environmental considerations: segregate unused recyclable paper and paper product packaging, uninstalled metals, and plastics, and have these sent to a recycling center.
- E. Prior to submittal, carefully inspect existing conditions to verify finish hardware required to complete Work, including sizes, quantities, existing hardware scheduled for re-use, and sill condition material. If conflict between the specified/scheduled hardware and existing conditions, submit request for direction from Architect. Include date of jobsite visit in the submittal.
  - 1. Submittals prepared without thorough jobsite visit by qualified hardware expert will be rejected as non-compliant.

1.7 WARRANTY:

- A. Part of respective manufacturers' regular terms of sale. Provide manufacturers' written warranties.
- B. Include factory order numbers with close-out documents to validate warranty information, required for Owner in making future warranty claims:
- C. Minimum warranties:
  - 1. Locksets: Three years
  - 2. Extra Heavy Duty Cylindrical Lock: Seven Years
  - 3. Exit Devices: Three years mechanical  
One year electrical
  - 4. Closers: Thirty years mechanical  
Two years electrical
  - 5. Hinges: One year
  - 6. Other Hardware Two years

1.8 COMMISSIONING:

- A. Conduct these tests prior to request for certificate of substantial completion:
  - 1. With installer present, test door hardware operation with climate control system and stairwell pressurization system both at rest and while in full operation.
  - 2. With installer, access control contractor and electrical contractor present, test electrical, electronic and electro-pneumatic hardware systems for satisfactory operation.
  - 3. With installer and electrical contractor present, test hardware interfaced



with fire/life-safety system for proper operation and release.

#### 1.9 REGULATORY REQUIREMENTS:

- A. Locate latching hardware between 34 inches to 44 inches above the finished floor, per-2019 California Building Code, Section 11B-404.2.7.
  - 1. Panic hardware: locate between 36 inches to 44 inches above the finished floor.
- B. Handles, pull, latches, locks, other operable parts:
  - 1. Readily openable from egress side with one hand and without tight grasping, tight pinching, or twisting of the wrist to operate. 2019 California Building Code Section 11B-309.4.
  - 2. Force required to activate the operable parts: 5.0 pounds maximum, per 2019 California Building Code Section 11B-309.4.
- C. Adjust doors to open with not more than 5.0-pounds pressure to open at exterior doors and 5.0-pounds at interior doors. As allowed per 2019 California Building Code Section 11B-404.2.9, local authority may increase the allowable pressure for fire doors to achieve positive latching, but not to exceed 15-pounds.
  - 1. Exception: exterior doors' pressure-to-open may be increased to 8.5-pounds if: at a single location, and one of a bank of eight leafs or fraction of eight, and one leaf of this bank is fitted with a low- or high-energy operator.
- D. Low-energy powered doors: comply with ANSI/BHMA A156.19. Reference: 2019 California Building Code Section 11B-404.2.9.
  - 1. Where powered door serves an occupancy of 100 or more, provide back-up battery power or stand-by generator power, capable of supporting a minimum of 100 cycles.
  - 2. Actuators, vertical bar type: minimum 2-inches wide, 30-inches high, bottom located minimum 5-inches above floor or ground, top located minimum 35-inches above floor or ground. Displays International Symbol of Accessibility, per 2019 California Building Code Section 11B-703.7.
  - 3. Actuators, plate type: use two at each side of the opening. Minimum 4-inches diameter or 4-inches square. Displays International Symbol of Accessibility, per 2019 California Building Code Section 11B-703.7. Locate centerline of lower plate between 7- and 8-inches above floor or ground, and upper plate between 30- and 44-inches above floor or ground.
  - 4. Actuator location: conspicuously located, clear and level floor/ground space for forward or parallel approach.
- E. Adjust door closer sweep periods so that from an open position of 90 degrees, the door will take at least 5 seconds to move to a point 12 degrees from the latch, measured to the landing side of the door, per 2019 California Building Code Section 11B-404.2.8.
  - 1. Spring hinges: adjust for 1.5 seconds minimum for 70 degrees to fully-closed.
- F. Smooth surfaces at bottom 10 inches of push sides of doors, facilitating push-

- open with wheelchair footrests, per 2019 California Building Code Section 11B-404.2.10.
1. Applied kickplates and armor plates: bevel the left and right edges; free of sharp or abrasive edges.
  2. Tempered glass doors without stiles: bottom rail may be less than 10 inches if top leading edge is tapered 60 degrees minimum.
- G. Door opening clear width no less than 32 inches, measured from face of frame stop, or edge of inactive leaf of pair of doors, to door face with door opened to 90 degrees. Hardware projection not a factor in clear width if located above 30 inches and below 80 inches, and the hardware projects no more than 4 inches. 2019 California Building Code Section 11B-404.2.3.
1. Exception: doors not requiring full passage through the opening, that is, to spaces less than 24 inches in depth, may have the clear opening width reduced to 20 inches. Example: shallow closets.
  2. Door closers and overhead stops: not less than 78 inches above the finished floor or ground, per 2019 California Building Code 11B-307.4.
- H. Thresholds: floor or landing no more than 0.50 inches below the top of the threshold of the doorway, per 2019 California Building Code Section 11B-404.2.5. Vertical rise no more than 0.25 inches, change in level between 0.25 inches and 0.50 inches: beveled to slope no greater than 1:2 (50 percent slope). 2019 California Building Code Section 11B-303.2 & ~.3.
- I. Floor stops: Do not locate in path of travel. Locate no more than 4 inches from walls, per DSA Policy #99-08 (Access).
- J. Pairs of doors with independently-activated hardware both leaves: limit swing of right-hand or right-hand-reverse leaf to 90 degrees to protect persons reading wall-mounted tactile signage, per 2019 California Building Code Section 11B-703.4.2.
- K. Door and door hardware encroachment: when door is swung fully-open into means-of-egress path, the door may not encroach/project more than 7 inches into the required exit width, with the exception of door release hardware such as lockset levers or panic hardware. These hardware items must be located no less than 34-inches and no more than 48-inches above the floor/ground. 2019 California Building Code, Section 1005.7.1.
1. In I-2 occupancies, surface mounted latch release hardware, mounted to the side of the door facing away from the adjacent wall where the door is in the open position, is not exempt from the inclusion in the 7-inch maximum encroachment, regardless of its mounting height, per 2019 California Building Code, Section 1005.7.1 at Exception 1.
- L. New buildings that are included in public schools (kindergarten through 12<sup>th</sup> grade) state funded projects and receiving state funding pursuant to Leroy F. Green, School Facilities Act of 1998, California Education Code Sections 17070.10 through 17079, and that are submitted to the Division of the State Architect for plan review after July 1, 2011 in accordance with the Education Code 17075.50, shall include locks that allow doors to classrooms and any room with an occupancy of five or more persons to be locked from the inside. The locks shall conform to the specification and requirements found in Section 1010.1.9. 2019 California Building Code Section 1010.1.11

Exceptions:

1. Doors that are locked from the outside at all times such as, but not limited to, janitor's closet, electrical room, storage room, boiler room, elevator equipment room and pupil restroom.
2. Reconstruction projects that utilize original plans in accordance with California Administrative Code, Section 4-314.
3. Existing relocatable buildings that are relocated within same site in accordance with California Administrative Code, Section 4-314.

PART 2 - PRODUCTS

2.1 MANUFACTURERS:

- A. Listed acceptable alternate manufacturers: these will be considered; submit for review products with equivalent function and features of scheduled products.

ITEM:	MANUFACTURER:	ACCEPTABLE ALTERNATE:
Hinges	(IVE) Ives	Bommer
Continuous Hinges	(IVE) Ives	Select
Pivots	(IVE) Ives	Rixson
Floor Closers	(RIX) Rixson	Dorma
Key System	(SCH) Schlage	Owner standard
Mechanical Locks	(SCH) Schlage	Owner standard
Electronic Locks	(SCE) Schlage Electronics	Owner standard
Exit Devices	(VON) Von Duprin	Owner standard
Closers	(LCN) LCN	Owner standard
Auto Flush Bolts	(IVE) Ives	DCI
Coordinators	(IVE) Ives	DCI
Silencers	(IVE) Ives	Rockwood, Trimco
Push & Pull Plates	(IVE) Ives	Rockwood, Trimco
Kickplates	(IVE) Ives	Rockwood, Trimco
Stops & Holders	(IVE) Ives	Rockwood, Trimco
Overhead Stops	(GLY) Glynn-Johnson	ABH
Thresholds	(ZER) Zero	NGP, Pemko

Seals & Bottoms	(ZER) Zero	NGP, Pemko
Key Cabinets	(LUN) Lund	TelKee
Aluminum Door Locks	(ADA) Adams Rite	None

## 2.2 HINGING METHODS:

- A. Drawings typically depict doors at 90 degrees, doors will actually swing to maximum allowable. Use wide-throw conventional or continuous hinges as needed up to 8 inches in width to allow door to stand parallel to wall for true 180-degree opening. Advise architect if 8-inch width is insufficient.
- B. Conform to manufacturer's published hinge selection standard for door dimensions, weight and frequency, and to hinge selection as scheduled. Where manufacturer's standard exceeds the scheduled product, furnish the heavier of the two choices, notify Architect of deviation from scheduled hardware.
- C. Conventional Hinges: Steel or stainless steel pins and approved bearings. Hinge open widths minimum, but of sufficient throw to permit maximum door swing.
  - 1. Outswinging exterior doors: non-ferrous with non-removable (NRP) pins and security studs.
  - 2. Non-ferrous material exteriors and at doors subject to corrosive atmospheric conditions.
- D. Continuous Hinges:
  - 1. Geared-type aluminum.
    - a) Use wide-throw units where needed for maximum degree of swing, advise architect if commonly available hinges are insufficient.
    - b) If units are used at storefront openings, color-coordinate hinge finish with storefront color. Custom anodizing and custom powdercoat finishes subject to Architect approval.

## 2.3 LOCKSETS, LATCHSETS, DEADBOLTS:

- A. Mortise Locksets and Latchsets: as scheduled.
  - 1. Chassis: cold-rolled steel, handing field-changeable without disassembly.
  - 2. Universal lock case – 10 functions in one case.
  - 3. Floating mounting tabs automatically adjusts to fit a beveled door edge.
  - 4. Latchbolts: 0.75 inch throw stainless steel anti-friction type.
  - 5. Lever Trim: through-bolted, accessible design, cast lever or solid extruded bar type levers as scheduled. Filled hollow tube design unacceptable.
    - a) Spindles: security design independent breakaway. Breakage of outside lever does not allow access to inside lever's hubworks to gain wrongful entry.
    - b) Inside lever applied by screwless shank mounting – no exposed trim mount screws.
    - c) Levers rotate up or down for ease of use.
    - d) Vandalgard locks: locked lever freely rotates down while

remaining securely locked. This feature prevents damage to internal lock components when subjected to excessive force.

6. Furnish solid cylinder collars with wave springs. Wall of collar to cover rim of mortise cylinder.
7. Turnpieces: accessible offset turn-lever design not requiring pinching or twisting motions to operate.
8. Deadbolts: stainless steel 1-inch throw.
9. Electric operation: Manufacturer-installed continuous duty solenoid.
10. Strikes: 16 gage curved steel, bronze or brass with 1 inch deep box construction, lips of sufficient length to clear trim and protect clothing.
11. Scheduled Lock Series and Design: Schlage L series, 06A design.
12. Certifications:
  - a) ANSI A156.13, Grade 1 Operational, Grade 1 Security.
  - b) ANSI/ASTM F476-84 Grade 31 UL Listed.
13. Accessibility: Require not more than 5 lb to retract the latchbolt or deadbolt, or both, per CBC 2019 11B-404.2.7 and 11B-309.4.

## 2.4 EXIT DEVICES / PANIC HARDWARE

### A. General features:

1. Independent lab-tested 1,000,000 cycles.
2. Push-through push-pad design. No exposed push-pad fasteners, no exposed cavities when operated. Return stroke fluid dampeners and rubber bottoming dampeners, plus anti-rattle devices.
3. Deadlocking latchbolts, 0.75 inch projection.
4. End caps: impact-resistant, flush-mounted. No raised edges or lips to catch carts or other equipment.
5. No exposed screws to show through glass doors.
6. Non-handed basic device design with center case interchangeable with all functions, no extra parts required to effect change of function.
7. Releasable in normal operation with 15-pound maximum operating force per UBC Standard 10-4, and with 32-pound maximum pressure under 250-pound load to the door.
8. Exterior doors scheduled with XP-series devices: Static load force resistance of at least 2000 pounds.
9. Accessibility: Require not more than 5 lb to retract the latchbolt, per CBC 2019 11B-404.2.7 and 11B-309.4.
  - a) Mechanical method: Von Duprin "AX-" feature, where touchpad directly retracts the latchbolt with 5 lb or less of force. Provide testing lab certification confirming that the mechanical device is independent third-party tested to meet this 5 lb requirement.
  - b) Electrical method: Von Duprin's "RX-QEL-", where lightly pressing the touchpad with 5 lb or less of force closes an electric switch, activating quiet electric latch retraction.

### B. Specific features:

1. Non-Fire Rated Devices: cylinder dogging.
2. Lever Trim: breakaway type, forged brass or bronze escutcheon min. 0.130 inch thickness, compression spring drive, match lockset lever design.

3. Rod and latch guards with sloped full-width kickplates for doors fitted with surface vertical rod devices with bottom latches.
4. Fire-Labeled Devices: UL label indicating "Fire Exit Hardware". Vertical rod devices less bottom rod (LBR) unless otherwise scheduled.
5. Impact recessed devices: 1.25 inch projection when push-pad is depressed. Sloped metal end caps to deflect carts, etc. No pinch points to catch skin between touchbar and door.
6. Delayed Egress Devices: Function achieved within single exit device component, including latch, delayed locking device, request-to-exit switch, nuisance alarm, remote alarm, key switch, indicator lamp, relay, internal horn, door position input, external inhibit input plus fire alarm input. NFPA 101 "Special Locking Arrangement" compliant.
7. Electrically Operated Devices: Single manufacturer source for electric latch retraction devices, electrically controlled trim, power transfers, power supplies, monitoring switches and controls.
8. Removable Mullions: Removable with single turn of building key. Securely reinstalled without need for key. Furnish storage brackets for securely stowing the mullion away from the door when removed.
9. Accepted substitutions:

## 2.6 CLOSERS

### A. Surface Closers:

1. Full rack-and-pinion type cylinder with removable non-ferrous cover and cast iron body. Double heat-treated pinion shaft, single piece forged piston, chrome-silicon steel spring.
2. ISO 2000 certified. Units stamped with date-of-manufacture code.
3. Independent lab-tested 10,000,000 cycles.
4. Non-sized, non-handed, and adjustable. Place closer inside building, stairs, and rooms.
5. Plates, brackets and special templating when needed for interface with particular header, door and wall conditions and neighboring hardware.
6. Adjust doors to open with not more than 5.0-pounds pressure to open at exterior doors and 5.0-pounds at interior doors. As allowed per 2016 California Building Code Section 11B-404.2.9, local authority may increase the allowable pressure for fire doors to achieve positive latching, but not to exceed 15-pounds.
  - a) Exception: exterior doors' pressure-to-open may be increased to 8.5-pounds if: at a single location, and one of a bank of eight leaves or fraction of eight, and one leaf of this bank is fitted with a low- or high-energy operator.
7. Separate adjusting valves for closing speed, latching speed and backcheck, fourth valve for delayed action where scheduled.
8. Extra-duty arms (EDA) at exterior doors scheduled with parallel arm units.
9. Exterior door closers: tested to 100 hours of ASTM B117 salt spray test, furnish data on request.
10. Exterior doors: seasonal adjustments not required for temperatures from 120 degrees F to -30 degrees F, furnish checking fluid data on request.
11. Non-flaming fluid, will not fuel door or floor covering fires.
12. Pressure Relief Valves (PRV) not permitted.

- B. Overhead Concealed Closers: Power transmitted to door separately from hanging means. Closer spindle does not support the door. Cast iron cylinders with hydraulically checked rack and pinion construction and single piece forged pistons. Separate non-critical sweep and latch speed valves.
  - 1. (2030) concealable in 1-3/4inch x 4inch tube, forged single-lever arm & extruded track power transmission, concealed-in-track bumpers where scheduled.
- C. LOW VOLTAGE AUTO OPERATORS:
  - 1. Comply with ANSI/BHMA 156.19 and 2019 California Building Code Section 11B-404.2.9, Exception 2: Electric power-open and close operation. Modular construction. Finished metal cover. Field-adjustable opening force, opening speed, time-open, closing and latching speeds. Door reopens and timing cycle restores if system reactivated during closing cycle. Breakaway clutch protection from forced closing. Door, frame, motor and drive train protected by attenuated initiation of opening cycle.
  - 2. Self-contained low-voltage power supply, terminal strip and sequencing for incorporation of electric hardware with system operation.
  - 3. Actuators: as scheduled
    - a) Plate type: minimum 4 inches square or 4 inches diameter. At each side of the opening, center one plate 7 inches to 8 inches above the finish floor, and another at 30 inches to 44 inches above the finish floor.
    - b) Vertical bar type: minimum 2 inches wide by 30 inches in height. Locate bar with bottom 5 inches maximum above finish floor, and top 35 inches minimum above finish floor.
    - c) Actuators of either type: display International Symbol of Accessibility (ISA) pictogram.
  - 4. Safety sensors: as scheduled.

## 2.7 OTHER HARDWARE

- A. Automatic Flush Bolts: Low operating force design.
- B. Overhead Stops: Non-plastic mechanisms and finished metal end caps. Field-changeable hold-open, friction and stop-only functions.
- C. Kick Plates: Four beveled edges, .050 inches minimum thickness, height and width as scheduled. Sheet-metal screws of bronze or stainless steel to match other hardware.
- D. Door Stops: Provide stops to protect walls, casework or other hardware.
  - 1. Unless otherwise noted in Hardware Sets, provide floor type with appropriate fasteners. Where floor type cannot be used, provide wall type. If neither can be used, provide overhead type.
  - 2. Locate overhead stops for maximum possible opening. Consult with Owner for furniture locations. Minimum: 90deg stop / 95deg deadstop. Note degree of opening in submittal.

- E. Automatic door bottoms: low operating force units. Doors with automatic door bottoms plus head and jamb seals cannot require more than two pounds operating force to open when closer is disconnected.
  - 1. Include automatic type door bottoms, as opposed to fixed sweeps, at stairs and elevator lobbies to allow fine-tuning of pressurization systems.
- F. Thresholds: As scheduled and per details. Comply with CBC 2019 11B-404.2.5. Substitute products: certify that the products equal or exceed specified material's thickness. Proposed substitutions: submit for approval.
  - 1. Saddle thresholds: 0.125 inches minimum thickness.
  - 2. Exteriors: Seal perimeter to exclude water and vermin. Use sealant complying with requirements in Division 7 "Thermal and Moisture Protection". Minimum 0.25 inch diameter fasteners and lead expansion shield anchors, or Red-Head #SFS-1420 (or approved equivalent) Flat Head Sleeve Anchors. National Guard Products' "COMBO" or Pemko Manufacturing's "FHSL".
  - 3. Fire-rated openings, 90-minutes or less duration: use thresholds to interrupt floor covering material under the door where that material has a critical radiant flux value less than 0.22 watts per square centimeter, per NFPA 253. Use threshold unit as scheduled. If none scheduled, include a 0.25in high 5in wide saddle in the bid, and request direction from Architect.
  - 4. Fire-rated openings, 3-hour duration: Thresholds, where scheduled, to extend full jamb depth.
  - 5. Acoustic openings: Set units in full bed of Division-7-compliant, leave no air space between threshold and substrate.
  - 6. Plastic plugs with wood or sheet metal screws are not an acceptable substitute for specified fastening methods.
  - 7. Fasteners: Generally, exposed screws to be Phillips or Robertson drive. Pinned TORX drive at high security areas. Flat head sleeve anchors (FHSL) may be slotted drive. Sheet metal and wood screws: full-thread. Sleeve nuts: full length to prevent door compression.
- G. Silencers: Interior hollow metal frames, 3 for single doors, 4 for pairs of doors. Leave no unfilled/uncovered pre-punched silencer holes. Intent: door bears against silencers, seals make minimal contact with minimal compression – only enough to effect a seal.
- H. Key Control Software: Same manufacturer as key cylinders, supply to Owner.
- I. Wall- & Floor-mounted electromagnetic door holders: LCN's SEM series or approved equivalent. Incorporate into U.L. listed fire & life-safety system, doors release to allow closure and latching when door's zone is in alarm state. Use minimum projection required to allow door to open as widely as allowed by wall conditions and projection of door hardware.

## 2.8 FINISH:

- A. Generally: BHMA 613/643E Oxidized and Oil Rubbed Bronze.
- B. Door closers: factory powder coated to match other hardware, unless otherwise noted.



- C. Finish designators used in appended hardware schedule:

## 2.9 KEYING REQUIREMENTS:

- A. Key System: existing (Sargent, Corbin-Russwin, Medeco, etc) system. Initiate and conduct meeting(s) with Owner to determine system structure, furnish Owner's written approval of the system; do not order keys or cylinders without written confirmation of actual requirements from the Owner. Furnish temporary construction-keyed and permanent cylinders. Contractor to demonstrate to the Owner that temporary keys no longer operate the locking cylinders at the end of the project.

## PART 3 - EXECUTION

### 3.1 ACCEPTABLE INSTALLERS:

- A. Can read and understand manufacturers' templates, suppliers' hardware schedule and printed installation instructions. Can readily distinguish drywall screws from manufacturers' furnished fasteners. Available to meet with manufacturers' representatives and related trades to discuss installation of hardware.

### 3.2 PREPARATION:

- A. Ensure that walls and frames are square and plumb before hardware installation. Make corrections before commencing hardware installation. Installation denotes acceptance of wall/frame condition.
- B. Locate hardware per SDI-100 and applicable building, fire, life-safety, accessibility, and security codes.
  - 1. Notify Architect of code conflicts before ordering material.
    - a. Locate latching hardware between 34 inches to 44 inches above the finished floor, per California Building Code, Section 1010.1.9.2 and 11B-404.2.7.
    - b. Locate panic hardware between 36 inches to 44 inches above the finished floor.
    - c. Where new hardware is to be installed near existing doors/hardware scheduled to remain, match locations of existing hardware.
- C. Overhead stops: before installing, determine proposed locations of furniture items, fixtures, and other items to be protected by the overhead stop's action.
- D. Existing frames and doors to be retrofitted with new hardware.
  - 1. Field-verify conditions and dimensions prior to ordering hardware. Fill existing hardware cut outs not being reused by the new hardware. Remove existing hardware not being reused, return to Owner unless directed otherwise.

2. Remove existing floor closers not scheduled for reuse, fill cavities with non-shrinking concrete and finish smooth.
3. Cut and weld existing steel frames currently prepared with 2.25 inch height strikes. Cut an approximate 8 inch section from the strike jamb and weld in reinforced section to accommodate specified hardware's strike.
4. Patch and weld flush filler pieces into existing door hardware preparations in steel doors and frames, leave surface smooth.
5. Glue in solid wood block fillers to fill cut outs in existing wood doors, sand surfaces smooth. Alternatively, use an approved epoxy-based wood filler product, submit product data for approval.

### 3.3 INSTALLATION

- A. Install hardware per manufacturer's instructions and recommendations. Do not install surface-mounted items until finishes have been completed on substrate. Set units level, plumb and true to line and location. Adjust and reinforce attachment substrate for proper installation and operation. Remove and reinstall or replace work deemed defective by Architect.
  1. Gaskets: install jamb-applied gaskets before closers, overhead stops, rim strikes, etc; fasten hardware over and through these seals. Install sweeps across bottoms of doors before astragals, cope sweeps around bottom pivots, trim astragals to tops of sweeps.
  2. When hardware is to be attached to existing metal surface and insufficient reinforcement exists, use RivNuts, NutSerts or similar anchoring device for screws.
  3. Use manufacturers' fasteners furnished with hardware items, or submit Request for Substitution with Architect.
  4. Replace fasteners damaged by power-driven tools.
- B. Locate floor stops no more that 4 inches from walls and not within paths of travel. See paragraph 2.2 regarding hinge widths, door should be well clear of point of wall reveal. Point of door contact no closer to the hinge edge than half the door width. Where situation is questionable or difficult, contact Architect for direction.
- C. Core concrete for exterior door stop anchors. Set anchors in approved non-shrink grout.
- D. Locate overhead stops for minimum 90 degrees at rest and for maximum allowable degree of swing.
- E. Drill pilot holes for fasteners in wood doors and/or frames.
- F. Lubricate and adjust existing hardware scheduled to remain. Carefully remove and give to Owner items not scheduled for reuse.
- G. Field-verify existing conditions and measurements prior to ordering hardware. Fill existing hardware cut outs not being used by the new hardware.
- H. Remove existing hardware not being reused. Tag and bag removed hardware, turn over to Owner.
- I. Where existing wall conditions will not allow door to swing using the scheduled hinges, provide wide-throw hinges and if needed, extended arms on closers.

- J. Provide manufacturer's recommended brackets to accommodate the mounting of closers on doors with flush transoms.

### 3.4. ADJUSTING

- A. Adjust and check for proper operation and function. Replace units, which cannot be adjusted to operate freely and smoothly.
  - 1. Hardware damaged by improper installation or adjustment methods: repair or replace to Owner's satisfaction.
  - 2. Adjust doors to fully latch with no more than 1 pound of pressure.
    - a) Door closer valves: turn valves clockwise until at bottom – do not force. Turn valves back out one and one-half turns and begin adjustment process from that point. Do not force valves beyond three full turns counterclockwise.
  - 3. Adjust delayed-action closers on fire-rated doors to fully close from fully-opened position in no more than 10 seconds.
  - 4. Adjust door closers per 1.9 this section.
- B. Inspection of fire door assemblies and means-of-egress panic-hardware doors: Per 2016 NFPA-80 5.2.1: hire an independent third-party inspection service to prepare a report listing these doors, and include a statement that there are zero deficiencies with the fire-rated assemblies and the openings with panic hardware.
  - 1. Per 2016 NFPA-80 5.2.1: Use a third party inspector not associated with the construction, supply or installation of this project to develop a field survey of the doors and hardware. Survey is to be done by a member certified as a FDAI (Fire Door Assembly Inspector), Certified AHC (Architectural Hardware Consultant) or a certified testing laboratory: UL or Intertek. Certified Inspectors may be found at [DHI.org](http://DHI.org), [Intertek](http://Intertek), or [CAFDI.org](http://CAFDI.org). ]
- C. Fire-rated doors:
  - 1. Wood doors: adjust to 0.125 inches clearance at heads, jambs, and meeting stiles.
  - 2. Steel doors: adjust to 0.063 inches minimum to 0.188 inches maximum clearance at heads, jambs, and meeting stiles.
  - 3. Adjust wood and steel doors to 0.75 inches maximum clearance (undercut) above threshold or finish floor material under door.
- D. Final inspection: Installer to provide letter to Owner that upon completion installer has visited the Project and has accomplished the following:
  - 1. Has re-adjusted hardware.
  - 2. Has evaluated maintenance procedures and recommend changes or additions, and instructed Owner's personnel.
  - 3. Has identified items that have deteriorated or failed.
  - 4. Has submitted written report identifying problems.

### 3.5 DEMONSTRATION:

- A. Demonstrate mechanical hardware and electrical, electronic and pneumatic hardware systems, including adjustment and maintenance procedures.



3.6 PROTECTION/CLEANING:

- A. Cover installed hardware, protect from paint, cleaning agents, weathering, carts/barrows, etc. Remove covering materials and clean hardware just prior to substantial completion.
- B. Clean adjacent wall, frame and door surfaces soiled from installation / reinstallation process.

3.7 SCHEDULE OF FINISH HARDWARE

- A. See door schedule in drawings for hardware set assignments.
- B. Do not order material until submittal has been reviewed, stamped, and signed by Architect's door hardware consultant.

Legend:

-  Link to catalog cut sheet
-  Electrified Opening

Hardware Group No. 01 - NEW DOOR, REUSE EXISTING.

For use on Door #(s):

100C	101A	L103	111A	L139	139A
L140	L141	L142	L142A	143	144
L145	L152	L153	L180	201A	206
208B	209	209A	218	219A	L230
L233	L234	L234A	237A	305	1003
1004	1006B	1028	1029	1030	1031
1032	1033	1034	1036	1038	1041
1042	1043	1044	1045B	1045C	1046
1047	1050	1051	1052	1053	1054
1055	1056	1057	1058	1059A	1061
1062	1063	1064	1066	1067	1068
1070	1071	1072	1073	1074	1075
1085	1091	1092	1093	1094	1095
1096	1097	1098A	1098B	1099	1102
1103	1104	1105	1106	1107	1108
1109	1110	1111	1112	1113	1114
1115	1116	1117	1118	1119	1120
1121	1122	1123	1135	1136	1137
1138	1139	1140	1141	1142	1143
1144	1145	1146	1147	1148	1149
1150	1151	1152	1153	1154	1155
1155A	T1003	T1017	T1018	T1022	T1025
T1026	T1027	T1028	T1029	T1030	T1031
T1032	T1033	T1034	T1035	T1040	T1041
T1042	T1045	T1048	T1100	T1107A	T1107B
T1108	T1325	T2013	T2015	T2019A	T2019B
T2020	T2021	T2022	T2023	T2024	T2025
T2033	T2039A	T2039B	T2040	T2058	T2304
T2335					

QTY		DESCRIPTION	CATALOG NUMBER			FINISH	MFR
	EA	NEW DOOR	REUSE EXISTING HARDWARE				

VERIFY EXISTING CONDITIONS PRIOR TO ORDERING HARDWARE. NEW DOOR PANEL. REUSE EXISTING HARDWARE. MATCH EXISTING HARDWARE IF REPLACEMENT IS REQUIRED.

Hardware Group No. 02 - NEW DOOR, REUSE EXISTING (PAIR).

For use on Door #(s):

L131                      1006A                      1037                      T1006

QTY		DESCRIPTION	CATALOG NUMBER		FINISH	MFR
	EA	NEW DOOR	REUSE EXISTING HARDWARE			

VERIFY EXISTING CONDITIONS PRIOR TO ORDERING HARDWARE. NEW DOOR PANEL. REUSE EXISTING HARDWARE. MATCH EXISTING HARDWARE IF REPLACEMENT IS REQUIRED.


Hardware Group No. 04 - EXISTING TO REMAIN, PAIR

For use on Door #(s):

1157






QTY		DESCRIPTION	CATALOG NUMBER		FINISH	MFR
	EA	NOTE	RE-USE ALL EXISTING HARDWARE AND FRAME			B/O

REUSE ALL EXISTING HARDWARE AND FRAME

Hardware Group No. 05 -  NEW DOOR/HARDWARE, INTERIOR, OFFICE, SPRING-ARM CLOSER, DK BRONZE

For use on Door #(s):

333


QTY		DESCRIPTION	CATALOG NUMBER		FINISH	MFR
3	EA	HINGE	5BB1HW 4.5 X 4.5		640	IVE
1	EA	OFFICE/ENTRY LOCK	L9050L 06A L583-363 L283-711		643e	SCH
1	EA	MORTISE CYLINDER	M3 X CAM AS REQ		643e	MED
1	EA	CONSTRUCTION CORE	BY MEDECO PER CAMPUS STANDARD		622	MED
1	EA	SURFACE CLOSER	4040XP SCUSH PROVIDE MOUNTING BRACKET, SPACER, PLATE AS REQUIRED		695	LCN
1	EA	KICK PLATE	8400 12" X 2" LDW B-CS		695	IVE
1	SET	GASKETING	328D-S		D	ZER

VERIFY EXISTING CONDITIONS PRIOR TO ORDERING HARDWARE.

Hardware Group No. 06 - 🚪 INTERIOR, NEW DOOR/CLOSER, REUSE BALANCE, DK BRONZE

For use on Door #(s):

201B	202	210	211	214	215
216	217	218A	219	226	226A
228	258	260	270	307	309
313	316	334	334A	340	365-RC


QTY		DESCRIPTION	CATALOG NUMBER		FINISH	MFR
1	EA	SURFACE CLOSER	4040XP SCUSH PROVIDE MOUNTING BRACKET, SPACER, PLATE AS REQUIRED		695	LCN
	EA	NOTE	RATED OPENING			
	EA	NEW DOOR	REUSE EXISTING HARDWARE			

VERIFY EXISTING CONDITIONS PRIOR TO ORDERING HARDWARE. IF WALL/FLOOR STOP EXISTS, CHANGE CLOSER ARM FROM SCUSH TO EDA. REUSE BALANCE OF EXISTING HARDWARE. MATCH EXISTING HARDWARE IF REPLACEMENT IS REQUIRED.

Hardware Group No. 07 - 🚪 NEW KICK PLATE, INTERIOR, REUSE BALANCE, DK BRONZE

For use on Door #(s):

349


QTY		DESCRIPTION	CATALOG NUMBER		FINISH	MFR
1	EA	KICK PLATE	8400 12" X 2" LDW B-CS		695	IVE
	EA	NOTE: EXISTING RATED OPENINGS	FIELD MODIFICATIONS LIMITED TO NFPA-80			

VERIFY EXISTING CONDITIONS PRIOR TO ORDERING HARDWARE. REUSE BALANCE OF EXISTING HARDWARE. MATCH EXISTING HARDWARE IF REPLACEMENT IS REQUIRED.


Hardware Group No. 08 - 🚪 NEW KICK PLATE, INTERIOR, REUSE BALANCE, CHROME

For use on Door #(s):

L248






QTY		DESCRIPTION	CATALOG NUMBER		FINISH	MFR
1	EA	KICK PLATE	8400 12" X 2" LDW B-CS		630	IVE
	EA	NOTE: EXISTING RATED OPENINGS	FIELD MODIFICATIONS LIMITED TO NFPA-80			

VERIFY EXISTING CONDITIONS PRIOR TO ORDERING HARDWARE. REUSE BALANCE OF EXISTING HARDWARE. MATCH EXISTING HARDWARE IF REPLACEMENT IS REQUIRED.

Hardware Group No. 09 -  NEW DOOR/HARDWARE, INTERIOR, OFFICE, SPRING-ARM CLOSER, DK BRONZE

For use on Door #(s):

227                      235                      237                      301



QTY		DESCRIPTION	CATALOG NUMBER		FINISH	MFR
3	EA	HINGE	5BB1HW 4.5 X 4.5		640	IVE
1	EA	OFFICE/ENTRY LOCK	L9050L 06A L583-363 L283-711		643e	SCH
1	EA	MORTISE CYLINDER	M3 X CAM AS REQ		613	MED
1	EA	CONSTRUCTION CORE	BY MEDECO PER CAMPUS STANDARD		622	MED
1	EA	SURFACE CLOSER	4040XP SCUSH PROVIDE MOUNTING BRACKET, SPACER, PLATE AS REQUIRED		695	LCN
1	EA	KICK PLATE	8400 12" X 2" LDW B-CS		695	IVE
1	SET	GASKETING	328D-S		D	ZER

VERIFY EXISTING CONDITIONS PRIOR TO ORDERING HARDWARE. IF WALL/FLOOR STOP EXISTS, CHANGE CLOSER ARM FROM SCUSH TO EDA.

Hardware Group No. 10 -  NEW DOOR/CLOSER/THRESHOLD, REUSE BALANCE, INTERIOR, DK BRONZE


For use on Door #(s):

324








QTY		DESCRIPTION	CATALOG NUMBER		FINISH	MFR
1	EA	SURFACE CLOSER	4040XP SCUSH PROVIDE MOUNTING BRACKET, SPACER, PLATE AS REQUIRED		695	LCN
1	EA	THRESHOLD	546A (OR PER SILL DETAIL)		A	ZER
	EA	NEW DOOR	REUSE EXISTING HARDWARE			

VERIFY EXISTING CONDITIONS PRIOR TO ORDERING HARDWARE. REUSE BALANCE OF EXISTING HARDWARE. MATCH EXISTING HARDWARE IF REPLACEMENT IS REQUIRED.




Hardware Group No. 11 -  NEW DOOR, HARDWARE, EXTERIOR, OFFICE, FLOOR STOP, INSWING, DK BRONZE



For use on Door #(s):  
 326B

QTY		DESCRIPTION	CATALOG NUMBER		FINISH	MFR
3	EA	HINGE	5BB1HW 4.5 X 4.5		640	IVE
1	EA	OFFICE/ENTRY LOCK	L9050L 06A L583-363 L283-711		643e	SCH
1	EA	MORTISE CYLINDER	M3 X CAM AS REQ		613	MED
1	EA	CONSTRUCTION CORE	BY MEDECO PER CAMPUS STANDARD		622	MED
1	EA	SURFACE CLOSER	4040XP EDA SRI		695	LCN
1	EA	FLOOR STOP	FS436/438 AS REQ		613	IVE
1	SET	GASKETING	328D-S		D	ZER
1	EA	DOOR SWEEP	39D		D	ZER
1	EA	THRESHOLD	103A (OR PER SILL DETAIL)		A	ZER

VERIFY EXISTING CONDITIONS PRIOR TO ORDERING HARDWARE.

Hardware Group No. 12 -  NEW DOOR/CLOSER/KICK PLATE, REUSE BALANCE, INTERIOR, DK BRONZE



For use on Door #(s):  
 162A                      302                      302A                      303                      303A                      307A  
 312                      314                      318

QTY		DESCRIPTION	CATALOG NUMBER		FINISH	MFR
1	EA	SURFACE CLOSER	4040XP EDA		695	LCN
1	EA	KICK PLATE	8400 12" X 2" LDW B-CS		695	IVE
	EA	NEW DOOR	REUSE EXISTING HARDWARE			

VERIFY EXISTING CONDITIONS PRIOR TO ORDERING HARDWARE. REUSE BALANCE OF EXISTING HARDWARE. MATCH EXISTING HARDWARE IF REPLACEMENT IS REQUIRED.

Hardware Group No. 13 - NEW PANIC/CLOSER, INTERIOR, CDSI PANIC, SPRING-STOP ARM, THUMBTURN DOGGING, CHROME







For use on Door #(s):  
 C111A                      C120C                      Z134C

QTY		DESCRIPTION	CATALOG NUMBER		FINISH	MFR
1	EA	PANIC HARDWARE	CDSI-PA-AX-99-L-NL-06		626	VON
1	EA	MORTISE CYL TURN	09-904 114 XB11-720 36-083		626	SCH
1	EA	RIM CYLINDER	M3 X TAILPIECE AS REQ PER CAMPUS STANDARD		626	MED
1	EA	CONSTRUCTION CORE	BY MEDECO PER CAMPUS STANDARD		622	MED
1	EA	SURFACE CLOSER	4040XP SCUSH		689	LCN

VERIFY EXISTING CONDITIONS PRIOR TO ORDERING HARDWARE. IF WALL/FLOOR STOP EXISTS, CHANGE CLOSER ARM FROM SCUSH TO EDA. REUSE BALANCE OF EXISTING HARDWARE. MATCH EXISTING HARDWARE IF REPLACEMENT IS REQUIRED.

Hardware Group No. 14 - NEW DOOR/HARDWARE, INTERIOR, OFFICE, CLOSER, FLOOR STOP, DK BRONZE


For use on Door #(s):  
 211A

QTY		DESCRIPTION	CATALOG NUMBER		FINISH	MFR
3	EA	HINGE	5BB1HW 4.5 X 4.5 NRP		640	IVE
1	EA	OFFICE/ENTRY LOCK	L9050L 06A L583-363 L283-711		643e	SCH
1	EA	MORTISE CYLINDER	M3 X CAM AS REQ		643e	MED
1	EA	CONSTRUCTION CORE	BY MEDECO PER CAMPUS STANDARD		622	MED
1	EA	SURFACE CLOSER	4040XP EDA		695	LCN
1	EA	KICK PLATE	8400 12" X 2" LDW B-CS		695	IVE
1	EA	FLOOR STOP	FS436/438 AS REQ		613	IVE
3	EA	SILENCER	SR64/SR65		GRY	IVE

VERIFY EXISTING CONDITIONS PRIOR TO ORDERING HARDWARE.

Hardware Group No. 15 - INTERIOR, NEW DOOR/CLOSER, REUSE BALANCE, DK BRONZE

For use on Door #(s):  
 L143                      L144                      304


QTY		DESCRIPTION	CATALOG NUMBER		FINISH	MFR
1	EA	SURFACE CLOSER	4040XP SCUSH PROVIDE MOUNTING BRACKET, SPACER, PLATE AS REQUIRED		695	LCN
	EA	NEW DOOR	REUSE EXISTING HARDWARE			

VERIFY EXISTING CONDITIONS PRIOR TO ORDERING HARDWARE. IF WALL/FLOOR STOP EXISTS, CHANGE CLOSER ARM FROM SCUSH TO EDA. REUSE BALANCE OF EXISTING HARDWARE. MATCH EXISTING HARDWARE IF REPLACEMENT IS REQUIRED.

Hardware Group No. 16 -  NEW CLOSER, REUSE BALANCE, INTERIOR, DK BRONZE

For use on Door #(s):

125	127	149	152	153	155
156	159	161	162B	173	227A
243	245	246	247	248	249
250	251	252	253	254	255
256	257	267	319C	337	338
339	344	345	347	354	357
362					



QTY		DESCRIPTION	CATALOG NUMBER		FINISH	MFR
1	EA	SURFACE CLOSER	4040XP SCUSH PROVIDE MOUNTING BRACKET, SPACER, PLATE AS REQUIRED		695	LCN
	EA	NOTE: EXISTING RATED OPENINGS	FIELD MODIFICATIONS LIMITED TO NFPA-80			

VERIFY EXISTING CONDITIONS PRIOR TO ORDERING HARDWARE. IF WALL/FLOOR STOP EXISTS, CHANGE CLOSER ARM FROM SCUSH TO EDA. REUSE BALANCE OF EXISTING HARDWARE. MATCH EXISTING HARDWARE IF REPLACEMENT IS REQUIRED.


Hardware Group No. 17 -  NEW CLOSER/KICK PLATE, REUSE BALANCE, INTERIOR, DK BRONZE

For use on Door #(s):



150	151	154	157	158	160
163	244	341	342	343	346
348	350	351	352		

QTY		DESCRIPTION	CATALOG NUMBER		FINISH	MFR
1	EA	SURFACE CLOSER	4040XP SCUSH PROVIDE MOUNTING BRACKET, SPACER, PLATE AS REQUIRED		695	LCN
1	EA	KICK PLATE	8400 12" X 2" LDW B-CS		695	IVE
	EA	NOTE: EXISTING RATED OPENINGS	FIELD MODIFICATIONS LIMITED TO NFPA-80			

VERIFY EXISTING CONDITIONS PRIOR TO ORDERING HARDWARE. IF WALL/FLOOR STOP EXISTS, CHANGE CLOSER ARM FROM SCUSH TO EDA. REUSE BALANCE OF EXISTING HARDWARE. MATCH EXISTING HARDWARE IF REPLACEMENT IS REQUIRED.

Hardware Group No. 18 -  NEW CLOSER/THRESHOLD, REUSE BALANCE, INTERIOR, DK BRONZE


For use on Door #(s):  
 162                      168

QTY		DESCRIPTION	CATALOG NUMBER		FINISH	MFR
1	EA	SURFACE CLOSER	4040XP SCUSH PROVIDE MOUNTING BRACKET, SPACER, PLATE AS REQUIRED		695	LCN
1	EA	THRESHOLD	546A (OR PER SILL DETAIL)		A	ZER
	EA	NOTE: EXISTING RATED OPENINGS	FIELD MODIFICATIONS LIMITED TO NFPA-80			

VERIFY EXISTING CONDITIONS PRIOR TO ORDERING HARDWARE. IF WALL/FLOOR STOP EXISTS, CHANGE CLOSER ARM FROM SCUSH TO EDA. REUSE BALANCE OF EXISTING HARDWARE. MATCH EXISTING HARDWARE IF REPLACEMENT IS REQUIRED.

Hardware Group No. 19 - NEW CLOSER, REUSE BALANCE, INTERIOR, DK BRONZE


For use on Door #(s):  
 166                      168A                      259A

QTY		DESCRIPTION	CATALOG NUMBER		FINISH	MFR
1	EA	SURFACE CLOSER	4040XP SCUSH PROVIDE MOUNTING BRACKET, SPACER, PLATE AS REQUIRED		695	LCN


VERIFY EXISTING CONDITIONS PRIOR TO ORDERING HARDWARE. IF WALL/FLOOR STOP EXISTS, CHANGE CLOSER ARM FROM SCUSH TO EDA. REUSE BALANCE OF EXISTING HARDWARE. MATCH EXISTING HARDWARE IF REPLACEMENT IS REQUIRED.

Hardware Group No. 20 - NEW CLOSER, REUSE BALANCE, INTERIOR, CHROME







For use on Door #(s):  
 Z101B                      Z120HB                      Z136A                      Z136B

QTY		DESCRIPTION	CATALOG NUMBER		FINISH	MFR
1	EA	SURFACE CLOSER	4040XP SCUSH		689	LCN

VERIFY EXISTING CONDITIONS PRIOR TO ORDERING HARDWARE. IF WALL/FLOOR STOP EXISTS, CHANGE CLOSER ARM FROM SCUSH TO EDA. REUSE BALANCE OF EXISTING HARDWARE. MATCH EXISTING HARDWARE IF REPLACEMENT IS REQUIRED.

Hardware Group No. 21 -  NEW DOOR/HARDWARE, INTERIOR, PASSAGE, THRESHOLD, SPRING-ARM CLOSER, DK BRONZE


For use on Door #(s):  
 310

QTY		DESCRIPTION	CATALOG NUMBER		FINISH	MFR
3	EA	HINGE	5BB1HW 4.5 X 4.5		640	IVE
1	EA	PASSAGE SET	L9010 06A		643e	SCH
1	EA	SURFACE CLOSER	4040XP SCUSH PROVIDE MOUNTING BRACKET, SPACER, PLATE AS REQUIRED		695	LCN
1	EA	KICK PLATE	8400 12" X 2" LDW B-CS		695	IVE
1	SET	GASKETING	328D-S		D	ZER
1	EA	THRESHOLD	271A (OR PER SILL DETAIL)		AL	PEM

VERIFY EXISTING CONDITIONS PRIOR TO ORDERING HARDWARE. IF WALL/FLOOR STOP EXISTS, CHANGE CLOSER ARM FROM SCUSH TO EDA.

Hardware Group No. 22 - NEW DOOR/KICK PLATE, INTERIOR, REUSE BALANCE


For use on Door #(s):  
 T2057

QTY		DESCRIPTION	CATALOG NUMBER		FINISH	MFR
1	EA	KICK PLATE	8400 12" X 2" LDW B-CS		630	IVE
	EA	NEW DOOR	REUSE EXISTING HARDWARE			


VERIFY EXISTING CONDITIONS PRIOR TO ORDERING HARDWARE. REUSE BALANCE OF EXISTING HARDWARE. MATCH EXISTING HARDWARE IF REPLACEMENT IS REQUIRED.

Hardware Group No. 23 -  NEW DOOR/KICK PLATE, REUSE BALANCE

For use on Door #(s):  
 L232                      L232A                      T2064







QTY		DESCRIPTION	CATALOG NUMBER		FINISH	MFR
1	EA	KICK PLATE	8400 12" X 2" LDW B-CS		630	IVE
	EA	NOTE: EXISTING RATED OPENINGS	FIELD MODIFICATIONS LIMITED TO NFPA-80			
	EA	NEW DOOR	REUSE EXISTING HARDWARE			

VERIFY EXISTING CONDITIONS PRIOR TO ORDERING HARDWARE. REUSE BALANCE OF EXISTING HARDWARE WHERE POSSIBLE. MATCH EXISTING HARDWARE IF REPLACEMENT IS REQUIRED.

Hardware Group No. 24 -  NEW DOOR/HARDWARE, INTERIOR, -2SI PANIC, OVERHEAD STOP, THUMBTURN DOGGING

For use on Door #(s):

135                      135A                      135B






QTY		DESCRIPTION	CATALOG NUMBER		FINISH	MFR
3	EA	HINGE	5BB1HW 4.5 X 4.5 NRP		652	IVE
1	EA	FIRE EXIT HARDWARE	PA-AX-99-L-F-2SI-06		626	VON
1	EA	RIM CYLINDER	M3 X TAILPIECE AS REQ PER CAMPUS STANDARD		626	MED
1	EA	CONSTRUCTION CORE	BY MEDECO PER CAMPUS STANDARD		622	MED
1	EA	RIM CYL THUMBTURN	XB13-379			SCH
1	EA	OH STOP	90S		630	GLY
1	EA	SURFACE CLOSER	4040XP EDA ST-2731 PROVIDE MOUNTING BRACKET, SPACER, PLATE AS REQUIRED		689	LCN
1	EA	KICK PLATE	8400 12" X 2" LDW B-CS		630	IVE
1	SET	GASKETING	328AA-S		AA	ZER

VERIFY EXISTING CONDITIONS PRIOR TO ORDERING HARDWARE.


Hardware Group No. 25 -  NEW DOOR/HARDWARE, INTERIOR, -2SI PANIC, THUMBTURN DOGGING, SPRING-ARM CLOSER, DK BRONZE

For use on Door #(s):

171                      201                      204                      215A







QTY		DESCRIPTION	CATALOG NUMBER		FINISH	MFR
3	EA	HINGE	5BB1HW 4.5 X 4.5 NRP		640	IVE
1	EA	FIRE EXIT HARDWARE	PA-AX-99-L-F-2SI-06		710	VON
1	EA	RIM CYLINDER	M3 X TAILPIECE AS REQ		613	MED
1	EA	CONSTRUCTION CORE	BY MEDECO PER CAMPUS STANDARD		622	MED
1	EA	RIM CYL THUMBTURN	XB13-379			SCH
1	EA	SURFACE CLOSER	4040XP SCUSH PROVIDE MOUNTING BRACKET, SPACER, PLATE AS REQUIRED		695	LCN
1	EA	KICK PLATE	8400 12" X 2" LDW B-CS		695	IVE
1	SET	GASKETING	328D-S		D	ZER

VERIFY EXISTING CONDITIONS PRIOR TO ORDERING HARDWARE.


Hardware Group No. 26 -  NEW DOOR/HARDWARE, INTERIOR, -2SI PANIC, THUMBTURN  
 DOGGING, FLOOR STOP, DK BRONZE

For use on Door #(s):

215B                    217A                    217B                    265                    314A                    316A  
 318A                    359









QTY		DESCRIPTION	CATALOG NUMBER		FINISH	MFR
3	EA	HINGE	5BB1HW 4.5 X 4.5 NRP		640	IVE
1	EA	FIRE EXIT HARDWARE	PA-AX-99-L-F-2SI-06		710	VON
1	EA	RIM CYLINDER	M3 X TAILPIECE AS REQ		613	MED
1	EA	CONSTRUCTION CORE	BY MEDECO PER CAMPUS STANDARD		622	MED
1	EA	RIM CYL THUMBTURN	XB13-379			SCH
1	EA	SURFACE CLOSER	4040XP EDA		695	LCN
1	EA	KICK PLATE	8400 12" X 2" LDW B-CS		695	IVE
1	EA	FLOOR STOP	FS436/438 AS REQ		613	IVE
1	SET	GASKETING	328D-S		D	ZER

VERIFY EXISTING CONDITIONS PRIOR TO ORDERING HARDWARE.

Hardware Group No. 27 -  NEW DOOR/HARDWARE, EXTERIOR, -2SI PANIC, THUMBTURN  
 DOGGING, FLOOR STOP, DK BRONZE

For use on Door #(s):


207A                    208A                    209B                    301A                    301B                    304A  
 304B                    311A                    312A                    312B                    314B                    318B  
 319A                    319B

QTY		DESCRIPTION	CATALOG NUMBER		FINISH	MFR
3	EA	HINGE	5BB1HW 4.5 X 4.5 NRP		613	IVE
1	EA	FIRE EXIT HARDWARE	PA-AX-99-L-F-2SI-06		710	VON
1	EA	RIM CYLINDER	M3 X TAILPIECE AS REQ		613	MED
1	EA	CONSTRUCTION CORE	BY MEDECO PER CAMPUS STANDARD		622	MED
1	EA	RIM CYL THUMBTURN	XB13-379			SCH
1	EA	SURFACE CLOSER	4040XP EDA		695	LCN
1	EA	KICK PLATE	8400 12" X 2" LDW B-CS		695	IVE
1	EA	FLOOR STOP	FS18S		BLK	IVE
1	SET	GASKETING	328D-S		D	ZER
1	EA	DOOR SWEEP	39D		D	ZER
1	EA	THRESHOLD	546A (OR PER SILL DETAIL)		A	ZER

VERIFY EXISTING CONDITIONS PRIOR TO ORDERING HARDWARE.

Hardware Group No. 28 - INTERIOR, NEW THRESHOLD, REUSE BALANCE


For use on Door #(s):  
 V155A                      V157A

QTY		DESCRIPTION	CATALOG NUMBER		FINISH	MFR
1	EA	THRESHOLD	546A (OR PER SILL DETAIL)		A	ZER

VERIFY EXISTING CONDITIONS PRIOR TO ORDERING HARDWARE. REUSE BALANCE OF EXISTING HARDWARE. MATCH EXISTING HARDWARE IF REPLACEMENT IS REQUIRED.

Hardware Group No. 29 - INTERIOR, NEW DOOR/THRESHOLD, REUSE BALANCE


For use on Door #(s):  
 207                      311                      T1015                      V130                      V132

QTY		DESCRIPTION	CATALOG NUMBER		FINISH	MFR
1	EA	THRESHOLD	546A (OR PER SILL DETAIL)		A	ZER
	EA	NEW DOOR	REUSE EXISTING HARDWARE			

VERIFY EXISTING CONDITIONS PRIOR TO ORDERING HARDWARE. REUSE BALANCE OF EXISTING HARDWARE. MATCH EXISTING HARDWARE IF REPLACEMENT IS REQUIRED.

Hardware Group No. 30 - INTERIOR, NEW DOOR/THRESHOLD, REUSE BALANCE, PAIR



For use on Door #(s):  
 T1046                      T2002                      T2065

QTY		DESCRIPTION	CATALOG NUMBER		FINISH	MFR
1	EA	THRESHOLD	546A (OR PER SILL DETAIL)		A	ZER
	EA	NEW DOOR	REUSE EXISTING HARDWARE			

VERIFY EXISTING CONDITIONS PRIOR TO ORDERING HARDWARE. REUSE BALANCE OF EXISTING HARDWARE. MATCH EXISTING HARDWARE IF REPLACEMENT IS REQUIRED.

Hardware Group No. 31 - INTERIOR, NEW CLOSER/THRESHOLD, REUSE BALANCE, PAIR, DK BRONZE

For use on Door #(s):  
 363

QTY		DESCRIPTION	CATALOG NUMBER		FINISH	MFR
2	EA	SURFACE CLOSER	4040XP SCUSH PROVIDE MOUNTING BRACKET, SPACER, PLATE AS REQUIRED		695	LCN
1	EA	THRESHOLD	546A (OR PER SILL DETAIL)		A	ZER

VERIFY EXISTING CONDITIONS PRIOR TO ORDERING HARDWARE. IF WALL/FLOOR STOP EXISTS, CHANGE CLOSER ARM FROM SCUSH TO EDA. REUSE BALANCE OF EXISTING HARDWARE. MATCH EXISTING HARDWARE IF REPLACEMENT IS REQUIRED.



Hardware Group No. 32 - INTERIOR, NEW CLOSER/THRESHOLD, REUSE BALANCE, DK BRONZE

For use on Door #(s):

230                      232                      259                      262

QTY		DESCRIPTION	CATALOG NUMBER		FINISH	MFR
1	EA	SURFACE CLOSER	4040XP SCUSH PROVIDE MOUNTING BRACKET, SPACER, PLATE AS REQUIRED		695	LCN
1	EA	THRESHOLD	546A (OR PER SILL DETAIL)		A	ZER
	EA	NOTE: EXISTING RATED OPENINGS	FIELD MODIFICATIONS LIMITED TO NFPA-80			
	EA	NEW DOOR	REUSE EXISTING HARDWARE			

VERIFY EXISTING CONDITIONS PRIOR TO ORDERING HARDWARE. IF WALL/FLOOR STOP EXISTS, CHANGE CLOSER ARM FROM SCUSH TO EDA. REUSE BALANCE OF EXISTING HARDWARE. MATCH EXISTING HARDWARE IF REPLACEMENT IS REQUIRED.

Hardware Group No. 33 - NEW CLOSER/THRESHOLD/STOPS, INTERIOR, REUSE BALANCE, PAIR, DK BRONZE

For use on Door #(s):

271

QTY		DESCRIPTION	CATALOG NUMBER		FINISH	MFR
2	EA	SURFACE CLOSER	4040XP EDA		695	LCN
2	EA	FLOOR STOP	FS436/438 AS REQ		613	IVE
1	EA	THRESHOLD	546A (OR PER SILL DETAIL)		A	ZER

VERIFY EXISTING CONDITIONS PRIOR TO ORDERING HARDWARE. REUSE BALANCE OF EXISTING HARDWARE WHERE POSSIBLE. MATCH EXISTING HARDWARE IF REPLACEMENT IS REQUIRED.


Hardware Group No. 34 - NEW DOOR/CLOSER, REUSE BALANCE, EXTERIOR, DK BRONZE, PAIR

For use on Door #(s):



175                      181A                      181AA                      269                      270A                      272  
 273                      275                      365                      367                      368                      370

QTY		DESCRIPTION	CATALOG NUMBER		FINISH	MFR
2	EA	SURFACE CLOSER	4040XP SCUSH PROVIDE MOUNTING BRACKET, SPACER, PLATE AS REQUIRED		695	LCN
	EA	NOTE	RATED OPENING			
	EA	NEW DOOR	REUSE EXISTING HARDWARE			

VERIFY EXISTING CONDITIONS PRIOR TO ORDERING HARDWARE. IF WALL/FLOOR STOP EXISTS, CHANGE CLOSER ARM FROM SCUSH TO EDA. REUSE BALANCE OF EXISTING HARDWARE. MATCH EXISTING HARDWARE IF REPLACEMENT IS REQUIRED.

Hardware Group No. 35 -  NEW DOOR/CLOSER/KICK PLATE, REUSE BALANCE, EXTERIOR, DK BRONZE


For use on Door #(s):  
 364

QTY		DESCRIPTION	CATALOG NUMBER		FINISH	MFR
2	EA	SURFACE CLOSER	4040XP SCUSH PROVIDE MOUNTING BRACKET, SPACER, PLATE AS REQUIRED		695	LCN
2	EA	KICK PLATE	8400 12" X 1" LDW B-CS		695	IVE
	EA	NEW DOOR	REUSE EXISTING HARDWARE			

VERIFY EXISTING CONDITIONS PRIOR TO ORDERING HARDWARE. IF WALL/FLOOR STOP EXISTS, CHANGE CLOSER ARM FROM SCUSH TO EDA. REUSE BALANCE OF EXISTING HARDWARE. MATCH EXISTING HARDWARE IF REPLACEMENT IS REQUIRED.

Hardware Group No. 36 - NEW DOOR/CLOSER, REUSE BALANCE, EXTERIOR, DK BRONZE





For use on Door #(s):  
 181

QTY		DESCRIPTION	CATALOG NUMBER		FINISH	MFR
2	EA	SURFACE CLOSER	4040XP SCUSH PROVIDE MOUNTING BRACKET, SPACER, PLATE AS REQUIRED		695	LCN
	EA	NEW DOOR	REUSE EXISTING HARDWARE			

VERIFY EXISTING CONDITIONS PRIOR TO ORDERING HARDWARE. IF WALL/FLOOR STOP EXISTS, CHANGE CLOSER ARM FROM SCUSH TO EDA. REUSE BALANCE OF EXISTING HARDWARE. MATCH EXISTING HARDWARE IF REPLACEMENT IS REQUIRED.

Hardware Group No. 37 - EXTERIOR, NEW PANIC/CLOSER/KICK PLATE, L-NL-PANIC, SPRING-STOP CLOSER, CHROME



For use on Door #(s):  
 Z109

QTY		DESCRIPTION	CATALOG NUMBER		FINISH	MFR
1	EA	PANIC HARDWARE	PA-AX-99-EO		626	VON
1	EA	PANIC HARDWARE	PA-AX-99-L-NL-06		626	VON
1	EA	RIM CYLINDER	M3 X TAILPIECE AS REQ PER CAMPUS STANDARD		626	MED
1	EA	CONSTRUCTION CORE	BY MEDECO PER CAMPUS STANDARD		622	MED
2	EA	SURFACE CLOSER	4040XP SCUSH		689	LCN
2	EA	KICK PLATE	8400 12" X 1" LDW B-CS		630	IVE

VERIFY EXISTING CONDITIONS PRIOR TO ORDERING HARDWARE. IF WALL/FLOOR STOP EXISTS, CHANGE CLOSER ARM FROM SCUSH TO EDA. REUSE BALANCE OF EXISTING HARDWARE. MATCH EXISTING HARDWARE IF REPLACEMENT IS REQUIRED.

Hardware Group No. 38 -  NEW DOOR/CLOSER/PLATE, INTERIOR, DK BRONZE


For use on Door #(s):  
 130A

QTY		DESCRIPTION	CATALOG NUMBER		FINISH	MFR
2	EA	SURFACE CLOSER	4040XP EDA		695	LCN
2	EA	KICK PLATE	8400 12" X 1" LDW B-CS		695	IVE
	EA	NEW DOOR	REUSE EXISTING HARDWARE			

VERIFY EXISTING CONDITIONS PRIOR TO ORDERING HARDWARE.  
 REUSE BALANCE OF EXISTING HARDWARE.  
 MATCH EXISTING HARDWARE IF REPLACEMENT IS REQUIRED.

Hardware Group No. 39 - NEW CLOSER/REUSE BALANCE, INTERIOR, DK BRONZE, PAIR


For use on Door #(s):  
 177                      177A                      268

QTY		DESCRIPTION	CATALOG NUMBER		FINISH	MFR
2	EA	SURFACE CLOSER	4040XP SCUSH PROVIDE MOUNTING BRACKET, SPACER, PLATE AS REQUIRED		695	LCN

VERIFY EXISTING CONDITIONS PRIOR TO ORDERING HARDWARE. IF WALL/FLOOR STOP EXISTS, CHANGE CLOSER ARM FROM SCUSH TO EDA. REUSE BALANCE OF EXISTING HARDWARE. MATCH EXISTING HARDWARE IF REPLACEMENT IS REQUIRED.

Hardware Group No. 40 -  NEW CLOSER/REUSE BALANCE, INTERIOR, DK BRONZE, PAIR


For use on Door #(s):  
 D-130                      366

QTY		DESCRIPTION	CATALOG NUMBER		FINISH	MFR
2	EA	SURFACE CLOSER	4040XP SCUSH PROVIDE MOUNTING BRACKET, SPACER, PLATE AS REQUIRED		695	LCN
	EA	NOTE: EXISTING RATED OPENINGS	FIELD MODIFICATIONS LIMITED TO NFPA-80			

VERIFY EXISTING CONDITIONS PRIOR TO ORDERING HARDWARE. IF WALL/FLOOR STOP EXISTS, CHANGE CLOSER ARM FROM SCUSH TO EDA. REUSE BALANCE OF EXISTING HARDWARE. MATCH EXISTING HARDWARE IF REPLACEMENT IS REQUIRED.

Hardware Group No. 41 -  NEW CLOSER, INTERIOR, ARCHED DOOR PAIR, DK BRONZE




For use on Door #(s):  
 326                      326A

QTY		DESCRIPTION	CATALOG NUMBER		FINISH	MFR
2	EA	SURFACE CLOSER	4040XP EDA		695	LCN
	EA	NOTE: EXISTING RATED OPENINGS	FIELD MODIFICATIONS LIMITED TO NFPA-80			

VERIFY EXISTING CONDITIONS PRIOR TO ORDERING HARDWARE. MATCH CURRENT CLOSER CONFIGURATION DUE TO UNIQUE ARCHED DOOR. REUSE BALANCE OF EXISTING HARDWARE. MATCH EXISTING HARDWARE IF REPLACEMENT IS REQUIRED.

Hardware Group No. 42 - EXTERIOR, NEW PANIC/CLOSER, CDSI PANIC, VANDAL PULL, SPRING-STOP CLOSER, THUMBTURN DOGGING, CHROME





For use on Door #(s):  
 Z100A              Z100C              Z121A              Z121H              Z134B              Z136C

QTY		DESCRIPTION	CATALOG NUMBER		FINISH	MFR
1	EA	PANIC HARDWARE	CDSI-PA-AX-99-NL-OP-110MD		626	VON
1	EA	RIM CYLINDER	M3 X TAILPIECE AS REQ PER CAMPUS STANDARD		626	MED
1	EA	RIM CYL THUMBTURN	XB13-379			SCH
1	EA	DOOR PULL	VR910 NL		630	IVE
1	EA	SURFACE CLOSER	4040XP SCUSH		689	LCN

VERIFY EXISTING CONDITIONS PRIOR TO ORDERING HARDWARE. IF WALL/FLOOR STOP EXISTS, CHANGE CLOSER ARM FROM SCUSH TO EDA. REUSE BALANCE OF EXISTING HARDWARE. MATCH EXISTING HARDWARE IF REPLACEMENT IS REQUIRED.

Hardware Group No. 43 - EXTERIOR, NEW PANIC/CLOSER/KICK PLATE, CDSI PANIC, VANDAL PULL, SPRING-STOP CLOSER, THUMBTURN DOGGING, CHROME

For use on Door #(s):  
 Z100B

QTY		DESCRIPTION	CATALOG NUMBER		FINISH	MFR
1	EA	PANIC HARDWARE	CDSI-PA-AX-99-NL-OP-110MD		626	VON
1	EA	RIM CYLINDER	M3 X TAILPIECE AS REQ PER CAMPUS STANDARD		626	MED
1	EA	RIM CYL THUMBTURN	XB13-379			SCH
1	EA	DOOR PULL	VR910 NL		630	IVE
1	EA	SURFACE CLOSER	4040XP SCUSH		689	LCN
1	EA	KICK PLATE	8400 12" X 2" LDW B-CS		630	IVE

VERIFY EXISTING CONDITIONS PRIOR TO ORDERING HARDWARE. IF WALL/FLOOR STOP EXISTS, CHANGE CLOSER ARM FROM SCUSH TO EDA. REUSE BALANCE OF EXISTING HARDWARE. MATCH EXISTING HARDWARE IF REPLACEMENT IS REQUIRED.

Hardware Group No. 44 - ⚡ EXTERIOR, NEW PANIC/READER/CLOSER, AD-400 PANIC, SPRING-STOP CLOSER, CHROME

For use on Door #(s):  
 Z121B

QTY		DESCRIPTION	CATALOG NUMBER			FINISH	MFR
1	EA	PANIC HARDWARE	PA-AX-99-EO			626	VON
1	EA	ELEC EXIT DEVICE TRIM	AD-400-993R-50-MT-RHO-L 4AA BATTERY		✓	626	SCE
1	EA	CYLINDER	M3 X CAM AS REQ			626	MED
1	EA	CONSTRUCTION CORE	BY MEDECO PER CAMPUS STANDARD			622	MED
1	EA	SURFACE CLOSER	4040XP SCUSH			689	LCN

COORDINATE: ACCESS CONTROL.

AD LOCK FOR TEMPLATING PURPOSES ONLY, AD LOCK TO BE PROVIDED BY DIV 28 CONTRACTOR.

VERIFY EXISTING CONDITIONS PRIOR TO ORDERING HARDWARE. IF WALL/FLOOR STOP EXISTS, CHANGE CLOSER ARM FROM SCUSH TO EDA. REUSE BALANCE OF EXISTING HARDWARE. MATCH EXISTING HARDWARE IF REPLACEMENT IS REQUIRED.

DOOR NORMALLY CLOSED AND LOCKED. PRESENTING VALID CREDENTIALS TO THE READER WILL MOMENTARILY UNLOCK THE DOOR, ALLOWING ACCESS. DOOR LOCKS ONCE THE DOOR CLOSES.

Hardware Group No. 45 - ⚡ EXTERIOR, NEW PANIC/READER/CLOSER/KICK PLATE, AD-400 PANIC, SPRING-STOP CLOSER, CHROME

For use on Door #(s):  
 ZG01

QTY		DESCRIPTION	CATALOG NUMBER			FINISH	MFR
2	EA	PANIC HARDWARE	PA-AX-99-EO			626	VON
1	EA	ELEC EXIT DEVICE TRIM	AD-400-993R-50-MT-RHO-L 4AA BATTERY		✓	626	SCE
1	EA	CYLINDER	M3 X CAM AS REQ			626	MED
1	EA	CONSTRUCTION CORE	BY MEDECO PER CAMPUS STANDARD			622	MED
2	EA	SURFACE CLOSER	4040XP SCUSH			689	LCN
2	EA	KICK PLATE	8400 12" X 1" LDW B-CS			630	IVE

COORDINATE: ACCESS CONTROL.




AD LOCK FOR TEMPLATING PURPOSES ONLY, AD LOCK TO BE PROVIDED BY DIV 28 CONTRACTOR.

VERIFY EXISTING CONDITIONS PRIOR TO ORDERING HARDWARE. IF WALL/FLOOR STOP EXISTS, CHANGE CLOSER ARM FROM SCUSH TO EDA. REUSE BALANCE OF EXISTING HARDWARE. MATCH EXISTING HARDWARE IF REPLACEMENT IS REQUIRED.

DOOR NORMALLY CLOSED AND LOCKED. PRESENTING VALID CREDENTIALS TO THE READER WILL MOMENTARILY UNLOCK THE DOOR, ALLOWING ACCESS. DOOR LOCKS ONCE THE DOOR CLOSES.

Hardware Group No. 46 - ⚡ EXTERIOR, NEW PANIC/READER/CLOSER, AD-400 PANIC, SPRING-STOP CLOSER, CHROME

For use on Door #(s):  
 ZG02

QTY		DESCRIPTION	CATALOG NUMBER			FINISH	MFR
2	EA	PANIC HARDWARE	PA-AX-99-EO			626	VON
1	EA	ELEC EXIT DEVICE TRIM	AD-400-993R-50-MT-RHO-L 4AA BATTERY		✓	626	SCE
1	EA	CYLINDER	M3 X CAM AS REQ			626	MED
1	EA	CONSTRUCTION CORE	BY MEDECO PER CAMPUS STANDARD			622	MED
2	EA	SURFACE CLOSER	4040XP SCUSH			689	LCN

COORDINATE: ACCESS CONTROL.

AD LOCK FOR TEMPLATING PURPOSES ONLY, AD LOCK TO BE PROVIDED BY DIV 28 CONTRACTOR.

VERIFY EXISTING CONDITIONS PRIOR TO ORDERING HARDWARE. IF WALL/FLOOR STOP EXISTS, CHANGE CLOSER ARM FROM SCUSH TO EDA. REUSE BALANCE OF EXISTING HARDWARE. MATCH EXISTING HARDWARE IF REPLACEMENT IS REQUIRED.

DOOR NORMALLY CLOSED AND LOCKED. PRESENTING VALID CREDENTIALS TO THE READER WILL MOMENTARILY UNLOCK THE DOOR, ALLOWING ACCESS. DOOR LOCKS ONCE THE DOOR CLOSES.

Maintenance Materials, Provide the following:

- As-built hardware schedule
- Copies of warranty information for each hardware type
- Binder of catalog cuts or complete catalog sections of items used, installation and maintenance/adjustment information.
- Collection of tools that were included with the hardware: wrenches, drivers, etc.

END OF SECTION

**ADDENDUM ATTACHMENT 4**

**REVISED**

**Door Hardware Designation Index**

(next page)

Addendum #2  
 Door Hardware Designation Index  
 LAC Campus Wide ADA Building Barrier Project  
 Revised 03.28.22

Legend:  
 ⚡ Electrified Opening

Buildin g	Door#	HwSet#
BLDG I	100C	01
BLDG I	101A	01
BLDG I	111A	01
BLDG D	125	16
BLDG D	127	16
BLDG D	130	40
BLDG D	130A	38
BLDG D	135	24
BLDG D	135A	24
BLDG D	135B	24
BLDG D	143	01
BLDG D	144	01
BLDG D	149	16
BLDG D	150	17
BLDG D	151	17
BLDG D	152	16
BLDG D	153	16
BLDG D	154	17
BLDG D	155	16
BLDG D	156	16
BLDG D	157	17
BLDG D	158	17

Buildin g	Door#	HwSet#
BLDG D	159	16
BLDG D	160	17
BLDG D	161	16
BLDG D	162	18
BLDG D	162A	12
BLDG D	162B	16
BLDG D	163	17
BLDG D	166	19
BLDG D	168	18
BLDG D	168A	19
BLDG D	171	25
BLDG D	173	16
BLDG D	175	34
BLDG D	177	39
BLDG D	177A	39
BLDG D	181	36
BLDG D	181A	34
BLDG D	181AA	34
BLDG D	201	25
BLDG D	201A	01
BLDG D	201B	06

Buildin g	Door#	HwSet#
BLDG D	202	06
BLDG D	204	25
BLDG D	207	29
BLDG D	207A	27
BLDG D	208A	27
BLDG D	208B	01
BLDG D	209	01
BLDG D	209A	01
BLDG D	209B	27
BLDG D	210	06
BLDG D	211	06
BLDG D	211A	14
BLDG D	214	06
BLDG D	215	06
BLDG D	215A	25
BLDG D	215B	26
BLDG D	216	06
BLDG D	217	06
BLDG D	217A	26
BLDG D	217B	26
BLDG D	218	01



Buildin g	Door#	HwSet#
BLDG D	218A	06
BLDG D	219	06
BLDG D	219A	01
BLDG D	226	06
BLDG D	226A	06
BLDG D	227	09
BLDG D	227A	16
BLDG D	228	06
BLDG D	230	32
BLDG D	232	32
BLDG D	235	09
BLDG D	237	09
BLDG D	237A	01
BLDG D	243	16
BLDG D	244	17
BLDG D	245	16
BLDG D	246	16
BLDG D	247	16
BLDG D	248	16
BLDG D	249	16
BLDG D	250	16
BLDG D	251	16
BLDG D	252	16
BLDG D	253	16

Buildin g	Door#	HwSet#
BLDG D	254	16
BLDG D	255	16
BLDG D	256	16
BLDG D	257	16
BLDG D	258	06
BLDG D	259	32
BLDG D	259A	19
BLDG D	260	06
BLDG D	262	32
BLDG D	265	26
BLDG D	267	16
BLDG D	268	39
BLDG D	269	34
BLDG D	270	06
BLDG D	270A	34
BLDG D	271	33
BLDG D	272	34
BLDG D	273	34
BLDG D	275	34
BLDG D	301	09
BLDG D	301A	27
BLDG D	301B	27
BLDG D	302	12
BLDG D	302A	12

Buildin g	Door#	HwSet#
BLDG D	303	12
BLDG D	303A	12
BLDG D	304	15
BLDG D	304A	27
BLDG D	304B	27
BLDG D	305	01
BLDG D	307	06
BLDG D	307A	12
BLDG D	309	06
BLDG D	310	21
BLDG D	311	29
BLDG D	311A	27
BLDG D	312	12
BLDG D	312A	27
BLDG D	312B	27
BLDG D	313	06
BLDG D	314	12
BLDG D	314A	26
BLDG D	314B	27
BLDG D	316	06
BLDG D	316A	26
BLDG D	318	12
BLDG D	318A	26
BLDG D	318B	27

Building	Door#	HwSet#
BLDG D	319A	27
BLDG D	319B	27
BLDG D	319C	16
BLDG D	324	10
BLDG D	326	41
BLDG D	326A	41
BLDG D	326B	11
BLDG D	333	05
BLDG D	334	06
BLDG D	334A	06
BLDG D	337	16
BLDG D	338	16
BLDG D	339	16
BLDG D	340	06
BLDG D	341	17
BLDG D	342	17
BLDG D	343	17
BLDG D	344	16
BLDG D	345	16
BLDG D	346	17
BLDG D	347	16
BLDG D	348	17
BLDG D	349	07
BLDG D	350	17

Building	Door#	HwSet#
BLDG D	351	17
BLDG D	352	17
BLDG D	354	16
BLDG D	357	16
BLDG D	359	26
BLDG D	362	16
BLDG D	363	31
BLDG D	364	35
BLDG D	365	34
BLDG D	365-RC	06
BLDG D	366	40
BLDG D	367	34
BLDG D	368	34
BLDG D	370	34
BLDG A	1003	01
BLDG A	1004	01
BLDG A	1006A	02
BLDG A	1006B	01
BLDG A	1028	01
BLDG A	1029	01
BLDG A	1030	01
BLDG A	1031	01
BLDG A	1032	01
BLDG A	1033	01

Building	Door#	HwSet#
BLDG A	1034	01
BLDG A	1036	01
BLDG A	1037	02
BLDG A	1038	01
BLDG A	1041	01
BLDG A	1042	01
BLDG A	1043	01
BLDG A	1044	01
BLDG A	1045B	01
BLDG A	1045C	01
BLDG A	1046	01
BLDG A	1047	01
BLDG A	1050	01
BLDG A	1051	01
BLDG A	1052	01
BLDG A	1053	01
BLDG A	1054	01
BLDG A	1055	01
BLDG A	1056	01
BLDG A	1057	01
BLDG A	1058	01
BLDG A	1059A	01
BLDG A	1061	01
BLDG A	1062	01

Buildin g	Door#	HwSet#
BLDG A	1063	01
BLDG A	1064	01
BLDG A	1066	01
BLDG A	1067	01
BLDG A	1068	01
BLDG A	1070	01
BLDG A	1071	01
BLDG A	1072	01
BLDG A	1073	01
BLDG A	1074	01
BLDG A	1075	01
BLDG A	1085	01
BLDG A	1091	01
BLDG A	1092	01
BLDG A	1093	01
BLDG A	1094	01
BLDG A	1095	01
BLDG A	1096	01
BLDG A	1097	01
BLDG A	1098A	01
BLDG A	1098B	01
BLDG A	1099	01
BLDG A	1102	01
BLDG A	1103	01

Buildin g	Door#	HwSet#
BLDG A	1104	01
BLDG A	1105	01
BLDG A	1106	01
BLDG A	1107	01
BLDG A	1108	01
BLDG A	1109	01
BLDG A	1110	01
BLDG A	1111	01
BLDG A	1112	01
BLDG A	1113	01
BLDG A	1114	01
BLDG A	1115	01
BLDG A	1116	01
BLDG A	1117	01
BLDG A	1118	01
BLDG A	1119	01
BLDG A	1120	01
BLDG A	1121	01
BLDG A	1122	01
BLDG A	1123	01
BLDG A	1135	01
BLDG A	1136	01
BLDG A	1137	01
BLDG A	1138	01

Buildin g	Door#	HwSet#
BLDG A	1139	01
BLDG A	1140	01
BLDG A	1141	01
BLDG A	1142	01
BLDG A	1143	01
BLDG A	1144	01
BLDG A	1145	01
BLDG A	1146	01
BLDG A	1147	01
BLDG A	1148	01
BLDG A	1149	01
BLDG A	1150	01
BLDG A	1151	01
BLDG A	1152	01
BLDG A	1153	01
BLDG A	1154	01
BLDG A	1155	01
BLDG A	1155A	01
BLDG A	1157	04
BLDG C	C111A	13
BLDG C	C120C	13
BLDG L	L103	01
BLDG L	L131	02
BLDG L	L139	01

Buildin g	Door#	HwSet#
BLDG L	L139A	01
BLDG L	L140	01
BLDG L	L141	01
BLDG L	L142	01
BLDG L	L142A	01
BLDG L	L143	15
BLDG L	L144	15
BLDG L	L145	01
BLDG L	L152	01
BLDG L	L153	01
BLDG L	L180	01
BLDG L	L206	01
BLDG L	L230	01
BLDG L	L232	23
BLDG L	L232A	23
BLDG L	L233	01
BLDG L	L234	01
BLDG L	L234A	01
BLDG L	L248	08
BLDG T	T1003	01
BLDG T	T1006	02
BLDG T	T1015	29
BLDG T	T1017	01
BLDG T	T1018	01

Buildin g	Door#	HwSet#
BLDG T	T1022	01
BLDG T	T1025	01
BLDG T	T1026	01
BLDG T	T1027	01
BLDG T	T1028	01
BLDG T	T1029	01
BLDG T	T1030	01
BLDG T	T1031	01
BLDG T	T1032	01
BLDG T	T1033	01
BLDG T	T1034	01
BLDG T	T1035	01
BLDG T	T1040	01
BLDG T	T1041	01
BLDG T	T1042	01
BLDG T	T1045	01
BLDG T	T1046	30
BLDG T	T1048	01
BLDG T	T1100	01
BLDG T	T1107A	01
BLDG T	T1107B	01
BLDG T	T1108	01
BLDG T	T1325	01
BLDG T	T2002	30

Buildin g	Door#	HwSet#
BLDG T	T2013	01
BLDG T	T2015	01
BLDG T	T2019A	01
BLDG T	T2019B	01
BLDG T	T2020	01
BLDG T	T2021	01
BLDG T	T2022	01
BLDG T	T2023	01
BLDG T	T2024	01
BLDG T	T2025	01
BLDG T	T2033	01
BLDG T	T2039A	01
BLDG T	T2039B	01
BLDG T	T2040	01
BLDG T	T2057	22
BLDG T	T2058	01
BLDG T	T2064	23
BLDG T	T2065	30
BLDG T	T2304	01
BLDG T	T2335	01
BLDG V	V130	29
BLDG V	V132	29
BLDG V	V155A	28
BLDG V	V157A	28

Buildin g	Door#	HwSet#
BLDG Z	Z100A	42
BLDG Z	Z100B	43
BLDG Z	Z100C	42
BLDG Z	Z101B	20
BLDG Z	Z109	37
BLDG Z	Z120HB	20
BLDG Z	Z121A	42
BLDG Z	Z121B ↗	44
BLDG Z	Z121H	42
BLDG Z	Z134B	42
BLDG Z	Z134C	13
BLDG Z	Z136A	20
BLDG Z	Z136B	20
BLDG Z	Z136C	42
BLDG Z	ZG01↗	45
BLDG Z	ZG02↗	46