NOTICE TO ALL CONTRACTORS

You are hereby notified of the following changes, clarifications and/or modifications to the original Contract Documents, Project Manual, Drawings, Specifications and/or previous Addenda. This Addendum shall supersede the original Contract Documents and previous Addenda wherein it contradicts the same, and shall take precedence over anything to the contrary therein. All other conditions remain unchanged.

This Addendum forms a part of the Contract Documents and modifies the original Contract Documents dated December 5, 2018, Addendum 1 dated February 12, 2019, Addendum 2 dated February 22, 2019, Addendum 3 dated March 4, 2019 and Addendum 4 dated March 8, 2019.

Acknowledgement receipt of this Addendum in space provided on the Bid Proposal Form. Failure to acknowledge may subject Bidder to disqualification.

A. Deletions, Additions, Changes, Revisions

GENERAL

1. SPECIFICATIONS

2. Section 08 71 00 Door Hardware
   Delete section 08 71 00 Door Hardware in its entirety and replace with attached section 08 71 00 Door Hardware in its entirety.

3. Section 27 11 00 Communications Equipment Rooms
   Revise article 2.6 Wireless Access Points (WAP) to read:
   
   A. Manufacturers: Ruckus (District Standard).
   B. Compatibility: 4x4 MIMO SU-MIMO, 4x4 MU-MIMO, IEEE 802.11a/b/g/n/ac Wave 2.
   C. Power: PoE from an Ethernet switch at the IDF.
   D. Coverage: Provide WAP locations in accordance with a manufacturer’s Predictive Site Survey (Hot Map). Design for occupied areas with the following parameters:
   a. Noise Floor: -85dBM
   b. 1 user/15 square feet min. Increase assumed density at occupied spaces to match actual seat count as shown on the fire exiting plans.
c. 2 devices per user.

d. Design basis is 802.11AC devices operating at 5 GHz. Design for 2.4 GHz to assume network will push capable devices to 5 GHz.

e. Assumed distribution of devices by spatial stream (ss) per device
   i. 1SS 25.00%
   ii. 2SS 60.00%
   iii. 3SS 15%

f. Design for -65% dBm signal strength minimum.

g. Signal to noise ratio of 25 dB min.

h. Max channel overlap: 2 at -85 dB.

i. Max packet loss: 2%

j. Round trip time 300 ms max.

k. Design capacity analysis should provide density as required to achieve 10 MBps minimum per device simultaneously.

E. Provide a complete planning report of the completed coverage analysis to the District for review prior to rough-in of device locations.

F. Testing: An as-installed signal coverage test shall be performed after the completion of installation and the Wireless LAN is running. Test in accordance with IEEE 802.11 standards. Provided test results for District review.

**DRAWINGS**

All drawing modifications are indicated on the drawings with a cloud graphic and a Delta AD5.

1. **Sheet A-621 – Schedules / Diagrams - Doors**
   Revise door schedule, see attached sketch AD5-A1.

2. **Sheet A-622 – Schedules / Diagrams – Doors**
   Revise door schedule, see attached sketch AD5-A2.

3. **Sheet E-001 – Symbols, Notes & Schedules**
   Add General Note #31 to read “Provide weatherproof rated devices or weatherproof covers for all devices located outdoors. All exterior devices are to be weatherproof regardless of whether there is a “WP” designation adjacent to the device or not.”

4. **Sheet ESD-111 Site Plan – Electrical Demolition**
   Delete entire sheet ESD-111 and replace with attached sheet ESD-111.

5. **Sheet ES-111 Site Plan – Electrical**
   Delete entire sheet ES-111 and replace with attached sheet ES-111.

6. **Sheet GA.ED-111 Building GA – Demolition Plan – Level 1**
   Delete entire sheet GA.ED-111 and replace with attached sheet GA.ED-111.
7. **Sheet GA.E-111 Building GA – Power Plan – Level 1**  
   Delete entire sheet GA.E-111 and replace with attached sheet **GA.E-111**.

8. **Sheet GA.E-112 Building GA – Power Plan – Level 2**  
   Add Temperature Control Panel in Mechanical A206 and provide 2#12 + 1#12G to GA-LR2-30. Update panel directory to reflect change. Refer to Mechanical drawings for exact panel location.

9. **Sheet GA.E-133 Building GA – Power Plan – Roof**  
   Revise homeruns to panel ‘A-M’ to read ‘GA-M’  
   Revise homeruns to panel ‘A-LR’ to read ‘GA-LR’  
   Revise MCU-A1 feeder to be 2#10 + 1#10 CU GND.

10. **Sheet GA.E-141 Building GA – Signal Plan – Level 1**  
    Add Sheet Note 2 to read “Refer to Contra Costa Community College District published Districtwide Infrastructure Standard, for additional structured cabling (voice and data) requirements. Refer to the District website for the standard.”

11. **Sheet GA.E-142 Building GA – Signal Plan – Level 2**  
     Delete entire sheet GA.E-142 and replace with attached sheet **GA.E-142**.

12. **Sheet GA.E-701 Building GA – Panel Schedules**  
     Delete entire sheet GA.E-701 and replace with attached sheet **GA.E-701**.

13. **Sheet G.ED-111 Building G – Demolition Plan – Level 1**  
     Delete entire sheet G.ED-111 and replace with attached sheet **G.ED-111**.

14. **Sheet G.E-111 Building G – Power Plan – Level 1**  
     Delete entire sheet G.E-111 and replace with attached sheet **G.E-111**.

15. **Sheet G.E-121 Building G – Lighting Plan – Level 1**  
     Delete entire sheet G.E-121 and replace with attached sheet **G.E-121**.

     Revise MHP-G4 and MHP-G5 feeders to be 2#10 + 1#10 CU GND.  
     Revise AC-G1 feeder to be 3#8 + 1#8 CU GND.  
     Revise AC-G2 feeder to be 3#10 + 1#10 CU GND.

17. **Sheet G.E-141 Building G – Signal Plan – Level 1**  
    Add Sheet Note 2 to read “Refer to Contra Costa Community College District published Districtwide Infrastructure Standard, for additional structured cabling (voice and data) requirements. Refer to the District website for the standard.”
18. **Sheet G.E-411 Building G – Enlarged Plans**  
   *Revise* IDF Closet G106 enlarged plan designation to read “2/G.E-411”.

19. **Sheet G.E-701 Building G – Panel Schedules**  
   *Delete* entire sheet G.E-701 and *replace* with attached sheet G.E-701.

20. **Sheet L.E-111 Building L – Power Plans – Level 1 & Roof**  
   *Revise* MHP-L1, MHP-L2, MHP-L3 and MHP-L4 feeders to be 2#10 + 1#10 CU GND.  
   *Revise* IDEC-L1 and IDEC-L2 feeders to be 1”C, 3#6 + 1#10 CU GND.

21. **Sheet L.E-141 Building L – Signal Plan – Level 1**  
   *Delete* entire sheet L.E-1.4.1 and *replace* with attached sheet L.E-141.

22. **Sheet L.E-701 Building L – Power Plans – Level 1 & Roof**  
   *Revise* (2) 70A/3P breakers at Panel ‘L-M’ circuits 1,3,5 & 7,9,11 to be 60A/3P breakers.  

23. **Sheet T.E-111 Building T – Power Plans – Level 1 & Roof**  
   *Revise* locations of AC-T1, AC-T3 and AC-T5, see attached sketch AD5-E1.  
   *Revise* MCU-T1 feeder, see attached sketch AD5-E1.

24. **Sheet T.E-141 Building T – Signal Plan – Level 1**  
   *Delete* entire sheet T.E-1.4.1 and *replace* with attached sheet T.E-141.

25. **Sheet T.E-701 Building T – Panel Schedules**  
   *Revise* (1) 20A/2P breaker at Panel ‘T-LR’ circuits 51,53 to be a 30A/2P breaker.

26. **Sheet E-514 Details**  
   *Revise* detail 1/E-514 title to read “MSB-GA Elevation”.

27. **Sheet E-515 Details**  
   *Revise* detail 1/E-515 title to read “Dist. Panel DP-GA Elevation”.

28. **Sheet E-601 One Line Diagrams - Demolition**  
   *Delete* entire sheet E-601 and *replace* with attached sheet E-601.

29. **Sheet E-602 Annex One Line Diagram - Modified**  
   *Delete* entire sheet E-602 and *replace* with attached sheet E-602.

30. **Sheet E-603 Gym One Line Diagram - Modified**
31. **Sheet E-604 Site Data One Line Diagrams**
   Detail 1/E-604 One Line Diagram – Site Data Cabling, Add Sheet Note 2 to read “Refer to Contra Costa Community College District published Districtwide Infrastructure Standard, for additional structured cabling (voice and data) requirements. Refer to the District website for the standard.”

32. **Sheet E-611 Campus Electrical Dist. System One Line Diagram - Demolition**
   Delete entire sheet E-611 and replace with attached sheet E-611.

33. **Sheet E-612 Campus Electrical Dist. System One Line Diagram - Modified**
   Delete entire sheet E-612 and replace with attached sheet E-612.

**B. ANSWERS TO BIDDERS QUESTIONS**

**Q1:** On sheet E-612, key note 1 says to provide a fused switch and to fuse it in the switchgear “SWGR1” enclosure. Is this switch replacing an (E) switch, or is it going into the future/spare space at the end of the enclosure?

**A1:** The provision of transformer T3A and associated switch and feeder is no longer within the scope of this project. See plan revisions on ES-111, GED-111, GE-111, and one line diagrams E-601, E-603, E-611 and E-612 for scope required regarding the transformer for this project.

**Q2:** For aforementioned new switch, campus single line diagram shows feeder F1A exiting switchgear “SWGR1”, continuing through manhole “2A” to switch “ST3A”/transformer “T3A”. Will this require a new 5” conduit with (3) #350 kcmil EPR, 133% 15KV conductors?

**A2:** See response to Q1.

**Q3:** Regarding old main switchgear “SWGR” feeder F1, is a new 5” conduit with (3) #350 kcmil EPR, 133% 15KV conductors?

**A3:** That is correct, See revision to E-612.

If you have any questions regarding this Addendum, please contact:
   Ben Cayabyab, Contracts Manager
   Contra Costa Community College District
   500 Court St., Martinez, CA 94553
   Email: bcayabyab@4cd.edu

All other terms and conditions of BID are to remain the same.
Lionakis
Architect of Record
1919 19th Street
Sacramento, CA 95811

END OF ADDENDUM #5
SECTION 08 71 00
DOOR HARDWARE

PART 1 GENERAL

1.1 SECTION INCLUDES

A. BHMA finish door hardware for gates, hollow metal, wood, and aluminum doors.
B. Accessories including but not limited to door stops, kickplates, and push/pull plates.
C. Weatherstripping, seals, and thresholds.
D. Auxiliary Locks (Padlocks.)
E. Removal of existing hardware at existing doors and frames and replacement with new hardware.

1.2 PRODUCTS SUPPLIED BUT NOT INSTALLED UNDER THIS SECTION

A. Hardware templates for doors, frames, and gates.

1.3 RELATED SECTIONS

A. Section 05 50 00 – Metal Fabrications: Fence gates.
B. Section 06 10 00 – Rough Carpentry.
C. Section 07 92 00 – Joint Sealants.
D. Section 08 11 13 – Hollow Metal Doors and Frames.
E. Section 08 14 00 – Wood Doors.
F. Section 08 41 13 – Aluminum Framed Entrances and Storefronts.
G. Section 08 71 13 – Automatic Door Operators.
H. Divisions 26 through 28: Electrical rough in, wiring and connectors for electrified hardware including, but not limited to:
   1. Wire and connectivity from ceiling through frame to electrified hardware devices including non-Section 08 71 00 task of providing wiring inside of doors.
   2. Section 08 71 13 “Automatic Door Operators”.
   3. FLS (Fire/Life Safety) Connectivity Scope: At fire and smoke rated opening, in event of fire/smoke, electrified strikes and auto operators to become non-electrified (drop power for doors can close, positive latch and to be only manually operated). Electrified fail-secure levers do not require to be coordinated with FLS system.

1.4 REFERENCES

A. The publications listed below form a part of this Section to the extent referenced. The publications are referred to in the text by the basic designation only.
   1. Refer to Division 01 for definitions, acronyms, and abbreviations.
2. Unless otherwise noted; standards, manuals, and codes refer to the latest edition as of the issue date of this Project Manual.

B. Conform to the following Referenced Standards and Requirements:

2. ADA – Americans with Disabilities Act - 2010 Standards for Accessible Design.
5. ANSI/BHMA 156.19 American National Standard for power high and low energy operated doors.
6. ANSI A156 Series – Builders Hardware Manufacturers Association (BHMA) Standards Set.
7. AAADM – American Association of Automatic Door Manufacturers.

C. Conform to the following Regulatory Requirements (CBC – 2016 California Building Code):

1. Doors / Doorways as part of an accessible route shall comply with CBC Sections 11B-404.
2. All hardware for accessible doors shall meet the requirements of CBC Sections 11B-404.2.7, 11B-404.2.9, and 1010.1.9.1.
3. The clear opening width for a door shall be 32 inches minimum. The swinging doors it shall be measured between the face of the door and the frame stop, with the door open 90 degrees.
   a. There shall be no projections into it below 34 inches above finish floor and 4 inch maximum projections into it between 34 inches and 80 inches above finish floor or ground.
   b. Door closers and stops shall be permitted to be 78 inches minimum above finish floor or ground per CBC Section 11B-404.2.3.2.
4. Hand-activated door opening hardware, handles, pulls, latches, locks, and other operating devices on accessible doors:
   a. Shall be operable with one hand and shall not require tight grasping, pinching, or twisting of the wrist.
   b. Lever hardware shall be so mounted / centered between 36 inches and 44 inches above finished floor or ground.
   c. Panic hardware shall be so mounted / centered between 36 inches and 44 inches above finished floor or ground. The clear width of the exit way is not less than 32 inches measured between the face of the door and the opposite stop per CBC Section 11B-404.2.3.
   d. Where slider doors are in the fully open position, operating hardware shall be fully exposed and usable from both sides per CBC Section 11B-404.2.7.
   e. Hardware for door handles, pulls, latches, locks and other operating devices for use on means of egress doors shall comply with SFM Standard 12-10-2, Section 12-10-202 as contained in CCR Title 24, Part 12.
5. The force for pushing or pulling a door open shall be as follows per CBC Section 11B-404.2.9:
   a. Interior hinged doors, sliding or folding doors and exterior hinged doors operating force required to push or pull open a door shall not exceed 5 pounds (22.2 N). Required fire doors shall have the minimum opening force allowable by DSA, not to exceed 15 pounds (66.7N).
      1) These forces do not apply with to the force required to retract latch bolts or disengage other devices that hold the door in a closed position.
   b. The force required to activate any operable parts, such as retracting latch bolts or disengaging other devices, shall be no greater than 5 pounds to comply with CBC Section 11B-309.4.
   c. Forces shall be applied to the latch side of the door per CBC Section 1010.1.3.1.

6. Door closing speeds shall be as follows per CBC 2016 Section 11B-404.2.8:
   a. Mount door closers for maximum swing of door before setting stops.
   b. Doors/gates closers, when provided, shall have sweep period adjusted: minimum of 5 seconds for a door/gate to close from the 90 degree position to the 12 degree position.
   c. Doors/gates with spring hinges require a minimum of 1.5 seconds to close from the 70 degree to the closed position.

7. Thresholds shall comply with CBC 2016.

8. Floor stops shall not be located in the path of travel and 4 inches maximum from walls.

9. Hardware (including panic hardware) shall not be provided with “Night Latch” (NL) function for any accessible doors or gates unless the following conditions are met per DSA interpretation 10-08 DSA / AC (External), revised 4/28/09. Such conditions must be clearly demonstrated and indicated in the specifications for devices:
   a. Such hardware has a “dogging” feature.
   b. It is dogged during the time the facility is open.
   c. Such “dogging” operation is performed only by employees as their job function (non-public use).

10. Pair of doors: limit swing of one leaf to 90 degrees so that a clear floor space is provided beyond the arc of the swing for the wall-mounted tactile sign per CBC Section 11B-703.4.2.

1.5 COORDINATION:

A. The hardware groups/sets specified in Section 08 71 00 - Part 3 are intended to establish type and design standard when used together with the requirements of this Section, Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections. Examine Contract Documents and furnish proper hardware for door openings. Refer to specifications for clarification and detailed requirements and provide products and services in specifications even if not written in hardware groups/sets in Section 08 71 00 - Part 3.
B. Coordinate work of this Section with other directly affected Sections involving manufacturer of any internal reinforcement for door hardware. In particular, coordinate door preparation in accordance with applicable regulatory and trade standards specified.

1. Provide hardware templates to door and frame manufacturer. Provide two templates to those manufacturers who are not currently registered template book holders.
2. Provide finish hardware schedule for use by the door and frame suppliers.
3. Where hardware sets/groups have different information than the specifications, refer to the Specifications and Drawings for clarification and bid combined hardware sets/groups and Contract Documents/Specifications. Provide combined materials/devices at time of submittals in addition to other coordination items:
   a. Coordinate keying requirements as specified in this Section.

C. Convene coordination meeting between all opening vendors and installers at least two weeks prior to purchasing doors, frames, door hardware, and electrical devices required for complete systems.

1. Required attendance includes, but is not limited to, the following: Contractor, hardware supplier and/or installer, door supplier and/or installer, frame supplier and/or installer, auto operator vendor and/or installer, security card reader vendor and/or installer, and electrical contractor.
2. Contractor shall be responsible for verifying that the door hardware accepted for installation is compatible for use with the doors and door-frames.
3. For card reader interface with applicable door devices, security vendor and/or installer (coordinate accordingly) shall have a written agenda and plan on how scope related to electrified devices will be installed to have a complete wired and operational card access system. The card reader interface scope includes, but is not limited to, card reader input and output coordination on the electric locking device power supply, electric locking devices and connectivity, and confirmation of a complete, wired, and operational card access system. Provide all required relays and devices as part of the overall system in accordance system requirements at no additional cost.
4. For auto operator interface with applicable door devices, auto operator vendor and/or installer (coordinate accordingly) shall have a written agenda and plan on how scope related to electrified devices will be installed to have a complete wired and operational auto operator system. The auto operator interface scope includes, but is not limited to, connectivity and inputs for push-plates, BEA BR3 or accepted equal required auto operator relays, electric locking devices, and confirmation of the complete, wired, and operational auto operator system. Provide all required relays and devices as part of the overall system in accordance with system requirements at no additional cost.

1.6 SUBMITTALS

A. General: Submit in accordance with Division 01.

B. Pre-Hardware Schedule:
   1. Report all prevailing conditions that will adversely affect satisfactory execution of work. Examine existing doors and/or frames scheduled for hardware replacement.
C. Submit a detailed door and hardware schedule according to the following:

1. Hardware Schedule:
   a. Submit hard copies of hardware schedule (number of copies per Division 01) as well as submit editable, PDF files via electronic email of ftp site process in vertical format as illustrated by the Sequence of Format for the Hardware Schedule as published by the Door and Hardware Institute. Schedules which do not comply will be returned for correction before checking. Horizontal-type schedules will be returned for correction before checking.
   b. Hardware schedule shall clearly indicate each hardware group specified and manufacturer of each item proposed. Vertical schedule format sample:

<table>
<thead>
<tr>
<th>Heading Number 1 (Door Schedule or Architectural Assigned Hardware Group/Set number from part 3 = HW -#01)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Single Door #1 - Exterior from Corridor 101</td>
</tr>
<tr>
<td>Opening Size</td>
</tr>
<tr>
<td>Quantity</td>
</tr>
<tr>
<td>4</td>
</tr>
<tr>
<td>1</td>
</tr>
<tr>
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</tbody>
</table>

2. Provide two copies of illustrations from manufacturer’s catalogs and data in brochure form.

3. Wiring Information: Provide manufacturers’ wiring information including manufacturers’ door elevation diagrams for electrified hardware based on Door Hardware Institute (DHI) core class “Electrified Architectural Hardware” DHI class #COR133. Provide information with hardware schedule submittal for review. Provide detailed wiring diagrams with hardware delivery to jobsite.

4. Review of schedules does not relieve the Contractor of providing all hardware required for the Work, whether or not such hardware was inadvertently omitted from Submittal.

D. Templates:

1. Provide listing of manufacturer’s template numbers for each item of hardware in hardware schedule.
2. Submit templates and "Reviewed Hardware Schedule" to door and frame supplier and others as applicable to enable proper and accurate sizing and locations of cutouts and reinforcing.

E. Installation Instructions:
   1. Provide manufacturer's written installation and adjustment instructions for finish hardware.
   2. Send installation instructions to site with hardware.

F. Single Manufacturers for Manufacturer's Devices.
   1. Obtain each type of hardware from single manufacturer, although several may be indicated as offering products complying with requirements.

G. Contract Closeout Submittals: Include specific requirements indicated below.
   1. Operating and maintenance manuals: Submit three sets containing the following:
      a. Complete information in care, maintenance, and adjustment, data on repair and replacement parts, and information on preservation of finishes.
      b. Catalog pages for each product.
      c. Name, address, and phone number of local representative for each manufacturer.
      d. Parts list for each product.
      e. Copy of final accepted hardware schedule, edited to reflect "As installed".
      f. Copy of final keying schedule.

1.7 QUALITY ASSURANCE:

A. Supplier Qualifications and Documentation:
   1. Hardware Supplier Qualifications: Firm specializing in the supply and servicing of institutional and commercial door hardware; accredited by manufacturers; and having a minimum of three years documented experience. Hardware supplier to furnish list of at least ten past, finished projects. Include date competed, project location, and references. At least one member of the firm’s staff shall be a member of DHI in good standing.

B. Manufacturer of Submitted Devices - Qualifications and Documentation:
   1. Manufacturer Qualifications: Manufacturer specializing in manufacturing institutional and commercial door hardware with a minimum five years with the following documented experience. Furnish list of at least ten past, finished projects. Include date competed, project location, and references. Past project contact information will determine if Builders Hardware is acceptable.

C. Installer of Submitted Devices - Qualifications and Documentation:
   1. Installer qualifications: The installer of assembly shall be trained in the trade of hanging commercial doors on commercial frames with commercial hardware. Supplier and Installer of door assemblies shall be authorized representative of manufacturers and have minimum of five years successful experience in detailing, supplying, and installing door assemblies specified on projects of similar size, complexity, and type to this Project. Provide written documentation to show closers will be installed by an individual with successful experience installing closers to meet 5-pound opening force for non-rated door complexity.
1.8 DELIVERY, STORAGE, AND HANDLING

A. Comply with requirements of Division 01.

B. Deliver products in manufacturer's original containers, dry and undamaged, with seals and labels intact.

C. Storage: Store materials in a cool and dry location, elevated from the ground and protected from the elements, and secured from theft or pilferage.

1.9 WARRANTY

A. Comply with provisions of Division 01.

B. Warranty installed units to be free from defects in material and workmanship as follows:
   1. Hinges: Lifetime Warranty (Life of Building).
   2. Locksets and Exit Devices: Three years.
   3. Closers: Ten years.
   4. All other hardware: Two years.

1.10 MAINTENANCE

A. Provide special wrenches and tools applicable to each special hardware component.

B. Provide maintenance tools and accessories supplied by hardware manufacturer.

PART 2 PRODUCTS

2.1 FINISH

A. Where hardware groups/sets have different information, refer to the following for clarification. Provide hardware groups/sets devices/finishes, along with added finishes below, as indicated on drawings and detailed requirements for each type of device:
   1. Typical BHMA finish designation references:
      a. BHMA 626 – Satin chromium plated brass or bronze.
      b. BHMA 630 – Satin stainless steel.
      c. BHMA 689 – Sprayed aluminum paint finish.

2.2 EXISTING CONDITIONS AND PRODUCTS

A. Examine Contract Documents and furnish proper finishes and services for each door opening (door, frame, and hardware).

B. Existing Remaining Hardware:
   1. See Section 08 71 00 as well as Contract Documents for additional hardware requirements.
2.3 RECYCLED CONTENT

A. Provide products with at least the following content:
   1. Mortise Locks: 40 percent post-consumer recycled content.
   2. Cylindrical Locks: 30 percent post-consumer recycled content.
   3. Closers: 30 percent post-consumer recycled content.
   4. Exit Devices: 40 percent post-consumer recycled content.
   5. Steel Hinges: 35 percent pre-consumer recycled content.
   6. Steel Kick Plates: 35 percent pre-consumer recycled content.

2.4 HARDWARE TEMPLATE

A. Make templates for hardware to be applied to metal doors or pre-finished doors.
B. Hinge templates shall conform to ANSI A156.7.
C. Promptly furnish template information or templates to door and frame manufacturers.
D. Coordinate hardware items to prevent interference with each other.

2.5 FIRE RATED DOORS AND EXIT DOORS

A. Where hardware groups/sets have different information, refer to the following for clarification. Provide hardware groups/sets devices along with added devices as indicated on drawings and detailed requirements for each type of device. Provide all specifications even if not written in hardware sets/groups.
B. Provide all hardware necessary to meet the requirements of CBC for fire doors and exit doors, as well as to other requirements specified, even if such hardware is not specifically mentioned under Article “Hardware Schedule” of this Section.

2.6 SCREWS, BOLTS, AND FASTENING DEVICES

A. Exposed head oval phillips type screws in countersunk holes unless otherwise specified. Use screws, bolts, washers, grommets, nuts, and other fastening devices of appropriate length, type, head, metal, and finish as necessary for proper match and application of hardware.
B. Threshold anchors shall be Flat Sleeve Anchors cadmium plated expansion anchor screw in one unit.

2.7 SUBSTITUTIONS

A. Products referenced by specific brand names and model numbers have been identified by Owner to match other products in use either completed or in the course of completion. No substitutions permitted per Public Contract Code Section 3400.
   1. Otherwise refer to Division 01 for substitutions.
2.8 HANGING HARDWARE

A. Gate Hanging Devices:
   1. Heavy duty full surface mounted hinge:
      a. Where “CBW-HD Series” hinge-type devices are specified in hardware group/sets, provide CBW-HD Series, full surface hinges by Crown Industrial, South San Francisco, CA; (650) 952-5150; http://www.crown-industrial.com/, or accepted equal.
      b. Provide at least two hinges per gate leaf.
         1) Provide two CBW-HD Series hinges for doors up to 72 inches high and one additional CBW-HD Series hinge for each 30 inches of height or fraction thereof.
         2) Furnish three CBW-HD Series hinges for doors over 36 inches wide regardless of the gate height.
         3) Provide additional number of offset hinge devices to meet hinge manufacturer device warranty and gate warranty.
      c. Provide widths sufficient to clear trim projection when door swings 180 degrees. Confirm hinge sizing with frame details. All doors shall swing 180 degrees if opening will allow. Provide wide throw hinges where required.
      d. Provide non-removable pins at exterior doors and where required by Owner for security reasons.
      e. Gate hinges shall be mounted and welded in accordance with manufacturer’s recommendations.
         1) Coordinate with welding requirements in Contact Documents.
         2) Provide devices ground smooth and painted to match gate/fence system – see Section 09 91 00 for paint and primer requirements.
   f. Products by the following manufacturers will be considered for acceptance providing all specified criteria have been met in full. Furnish all items and components of hardware required to complete the work in accordance with specifications, Contract Documents, and intended operation.
      2) Ameristar.
      3) Monumental Iron Works.

2. Ornamental and Steel Gate Self-Closing Hinges:
   a. Acceptable Manufacturers:
      1) Locinox Manufacturing (no known equal).
   b. Mammoth 180-Degree Hydraulic Closers/Hinges Set.
   c. Heavy duty full surface mounted hinge and vertical built-in closer not exceed 5 pounds opening force.
B. Butt Hinges:

1. Butt hinges shall be manufactured in accordance with ANSI/BHMA A156.1.

2. Where hardware groups/sets have different information (number of hinges and sizing), refer to the following for clarification. Provide hardware groups/sets devices along with added devices as indicated on Drawings and detailed requirements for each type of device.
   a. Butt hinges shall be manufactured in accordance with ANSI/BHMA A156.1.
   b. Provide wide throw hinges where required:
      1) Whether new or existing openings (existing doors or frames to remain), submit and provide hinge widths sufficient to clear trim projection when door swings 180 degrees. All doors shall swing 180 degrees if wall allows.
      2) Utilize wide throw type hinges to clear frame or wall obstructions/cladding in order for doors to completely open. See 180 degree language above.
      3) Where a door closer device is specified and will be installed on pull side/hinged side of doors (i.e. closers will hit walls or other surfaces when door is completely open), provide wide throw type hinges to give sufficient pocket depth to hide closer behind door. Do not pinch or crush closer between the door and wall surface.
      4) Confirm hinge sizing with frame and wall details.
   c. Provide “weight/strength” as specified in hardware groups/sets in Part 3 (hinge nomenclature basis-of-design weight/strength).
   d. For doors 1-3/4 inches thick and up to 36 inches wide, provide hinge height of 4-1/2 inches.
   e. For doors 1-3/4 inches thick and 37 inches to 48 inches wide, provide heavy duty, four ball bearing hinges and height of 5 inches.
   f. If hardware sets specify height (example: 5 inches tall at 36 inch wide door), provide height as specified for project standards at these locations.
   g. Provide two butts for doors up to 60 inches high and one additional butt for each 30 inches of height or fraction thereof.
   h. Provide non-removable pins at exterior doors.
   i. Provide ball-bearing hinges. Non-ball-bearing hinges are not acceptable.
   j. Electric Hinges: Provide electrified hinges with certified UL Listed, concealed wires. Provide electric hinges with standardized wire colors to accommodate up to 12 wires (4, 6, 8 or 12 as required per to provide sufficient number of concealed wires to accommodate electric function of specified hardware). If additional wires are specified (more than needed for electrified devices), provide the wires specified.
   k. For existing or retrofit openings, verify hinges in field before submittals. See additional specifications in Part 3, hardware group sets as well as drawings for additional existing or retrofit requirements.
C. Continuous Hinges:
   1. Acceptable Stainless-Steel Manufacturers:
      a. Markar Manufacturing.
      b. Ives Manufacturing by Allegion.
      c. Pemko Manufacturing.
      d. Bommer Manufacturing.
      e. Select Hinges.
      f. McKinney Products Co.
      g. Stanley Works.
   2. Where hardware groups/sets have different information, refer to the following for clarification. Provide hardware groups/sets devices along with added devices as indicated on Drawings and detailed requirements for each type of device:
      a. Provide widths sufficient to clear trim projection when door swings 180 degrees. Confirm hinge sizing with frame details. All doors shall swing 180 degrees if opening will allow. Provide wide throw hinges where required.
      b. Provide continuous hinge that meet cycle testing in accordance with ANSI/BHMA Standard A156.26, Grade 1.
      c. Stainless steel hinges shall meet abuse test per ASTM F1450.
      e. Continuous hinges shall not obscure fire rated labels of the doors or frames.

2.9 SECURING DEVICES (LATCHING SYSTEMS)

A. Provide all latching devices that are lockable including, but not limited to, door locks and panic/exit devices that comply with CBC Sections 1010.1.9 through 1010.1.11. All new construction projects shall include locks that allow the doors to be locked from the inside. This requirement applies to classrooms and any other school room with an occupancy of five or more persons, but does not include doors that are locked from the outside at all times or student restrooms.

B. Mortise Locksets, Latchsets:
   1. Acceptable Manufacturers:
      a. Schlage Lock Co. L9000 Series.
      b. Owner’s standard, no substitutions permitted.
   2. Levers:
      a. Provide levers to return to door within 1/2 inch.
      b. Traditional Square Style as specified.
c. Provide exterior side lever trim with vandal resistant feature (heavy duty lever trim designed to withstand abuse and vandalism):
   1) Schlage L9000 series Vandlgard™. Vandlgard example nomenclature: Storeroom Lockset LV9080 (added “V” nomenclature after the “L” nomenclature for lockset to have increased strength against abuse or vandalism) Locked lever freely rotates up and down while remaining securely locked. Provide seven-year warranty.

3. Where hardware groups/sets have different information, refer to the following for clarification. Provide hardware groups/sets devices along with added devices as indicated on Drawings and detailed requirements for each type of device:
   a. Locksets shall meet the requirements of ANSI/BHMA A156.13-1994, Operational Grade 1.
   b. Provide only thumbturn devices that meet accessibility requirements. Example: Schlage #L283-722 devices. No center pivoting thumbturns allowed.
   c. If deadbolts or lockbolts are utilized on the project, devices shall be interconnected with the latching mechanism on all egress doors to provide single movement function to unlatch doors.
   e. Strikes:
      1) Provide ANSI 4-7/8 inch standard strike.
      2) Provide curved lip-type strike at all locations if possible to prevent catching clothing or other objects on strike. Where required, provide detail and flat strike.
      3) Where required, provide extended lip strike so that the lock or latchset latch will not come in contact with frame or added trim on or adjacent to the frame. Example: Don Jo device #MEST-104, but provide submitted manufacturer equivalent extended lip strike.
      4) Where required, provide open back strike and protected to allow practical and secure operation.
      5) Existing Strikes:
         a) Field verify existing strikes. Provide and install new ANSI 4-7/8 inch or standard 2-3/4 inch strikes to match existing frame preparation/template unless “Unit-type” locks and latchsets were previously installed.
         b) Where “Unit-type” locks and latchsets were previously installed, as part of Contract, provide labor and material to retrofit “Unit-type” locks and latchsets strikes to become ANSI 4-7/8 inch for mortise devices.

C. Exit Devices and Removable Mullions: ANSI A156.3, Grade 1; UL Listed.
   1. Acceptable Manufacturers:
      a. Von Duprin.
      b. Owner’s standard, no substitutions permitted.
   2. Where hardware groups/sets have different information, refer to the following for clarification. Provide hardware groups/sets devices along with added devices as indicated on Drawings and detailed requirements for each type of device:
      a. All exit devices shall be UL listed for panic. Exit devices for labeled doors shall be UL listed as "Fire Exit Hardware".

c. Where removable mullions are not specified in hardware groups, provide keyed removable mullions at all locations in order for door to properly latch and secure rooms and buildings with rim or mortise type exit/panic bar devices.
   1) Provide stabilizers for removable mullions at all locations.

d. Whether or not specified throughout project, verify if Electrical, IDF and other rooms with electrical coordination have 800 amps or more than 800 amps housed within the rooms. At these rooms, if lever locksets are specified, credit the locking device and provide the Von Duprin mortise-type panic device #9975NL-F x 996L-M x key override.

e. Trim:
   1) Where lever trim is specified, provide lever design to match lockset levers.
   2) Provide exit device lever trim with vandal resistant feature (heavy duty lever trim designed to withstand abuse and vandalism):
      a) Von Duprin 996 R/V.

f. The unlatching force of panic hardware shall not exceed 5 pounds, applied in the direction of travel, certified by UL to meet requirements of CBC Section 11B-309.4 (Von Duprin nomenclature “AX”).

g. All exit devices shall be shipped to project site with exit device, isometric cap as to not catch items on panic device push bar (Von Duprin nomenclature “PA”).

D. Flush Bolts and Dust Proof Strikes:

1. Acceptable Manufacturers:
   b. McKinney Products.
   c. Rockwood.
   d. Hager Manufacturing.
   e. Ives Manufacturing.

2. Where hardware groups/sets have different information, refer to the following for clarification. Provide hardware groups/sets devices along with added devices as indicated on Drawings and detailed requirements for each type of device:
a. Non-rated Openings: Where not specified in hardware sets provide supply two flush bolts for inactive leaf of pairs of locked and latched doors. Locate centerline of top bolt not more than 78 inches from finished floor. Provide dustproof strike for bottom bolts, type as required for floor condition.

b. Rated Openings: Where not specified in hardware sets provide automatic flush bolt set as applicable for inactive leaf of pairs of doors. Provide dustproof strike for bottom bolts, type as required for floor condition.

E. Coordinators:

1. Manufacturers:
   b. McKinney Products.
   c. Rockwood.
   d. Hager Manufacturing.
   e. Ives Manufacturing.

2. Where hardware groups/sets have different information, refer to the following for clarification. Provide hardware groups/sets devices along with added devices as indicated on Drawings and detailed requirements for each type of device:

   a. Provide coordinator for fire rated or smoke labeled pairs of doors equipped with automatic flush bolts and those with vertical rod/mortise lock fire exit device combinations with astragals.

   b. Provide filler bars for total opening width, closer mounting brackets to allow proper installation of stop mounted hardware without damaging coordinator, carry bars, and special preparation for top latches where applicable.

F. Fire Control Key Boxes:

1. Product: Rapid Entry System.


3. Recessed mount, UL-listed, heavy-duty unit; fabricate from 1/4-inch-thick steel plate.

4. Provide with restricted keying as required by Local Fire Department.

5. Provide one box at each main entry from each parking area designated with a fire emergency lane.

2.10 KEY SYSTEMS (CYLINDERS, CORES, AND KEYS)

A. Where hardware groups/sets have different information refer to the following for clarification. Provide hardware groups/sets devices along with added devices as indicated on drawings and detailed requirements for each type of device. Keying specifications below override hardware set/group nomenclature.

B. Re-Key Existing Doors:

1. Re-key all existing doors: examine existing openings/doors and during submittal provide plan for re-keying existing hardware to match new keying system per the below and specified in hardware set/groups below.

2. Provide hardware necessary for completion of the work.
C. Key Systems (Cylinders, Cores, and Keys):
   1. Manufacturers:
      a. Schlage Lock Co.
      b. Existing building site standard, no substitutions.
   2. For all locking or dogging devices, provide complete keying system whether or not
      specified in Section 08 71 00, Part 3 hardware sets including lock cores, mortise
      cylinders, and rim cylinders keyed as directed by Owner in submittal process. Key
      System shall be:
   3. Keyway: Provide as instructed by Owner during submittal process.

D. Keying Requirements:
   1. Provide keyed, construction cores and keys during the construction period.
      a. Provide full sized cylinders or brass construction cores and brass keys at all interior
         and exterior doors. Plastic cores are not permitted.
      b. Construction control and operating keys and core shall not be part of the Owner's
         permanent keying system or furnished in the same keyway or key section as the
         Owner's permanent keying system. Permanent cores and keys (prepared according
         to the accepted keying schedule) shall be furnished to the Owner.
   2. Keying Meeting and Programming Schedule:
      a. After hardware has been submitted and reviewed in accordance with Division 01
         requirements and Section 08 71 00, arrange a keying matrix/programming meeting
         with Owner and hardware supplier/Vendor representing the Schlage Restricted
         Keyway system.
         1) Copies of the reviewed door and frame submittals shall be brought to the meeting
            with card reader and keyed doors highlighted for review.
         2) Follow procedures for keying meeting and programming schedule as outlined by
            the Door Hardware Institute. DHI procedures are based on example Door
            Hardware Institute core class entitled Masterkeying class #AHC200.
      b. Keying meeting to produce a programming schedule/matrix based on the following:
         1) Furnish keys in the following quantities (total quantity of keys part of bid package):
            a) 5 each Grand master-keys per set.
            b) 6 each Masterkeys per set.
            c) 3 each Change keys each lock, core or cylinder.
            d) 5 each Permanent Extractor keys.
            e) 9 each Construction masterkeys.
            f) 2 each Construction Core Extractor keys.
         2) Provide keying system expansion parameters.
            a) Plan twenty changes directly under the grand.
            b) Plan ten master keys.
            c) Plan fifty changes each for each master.
3) Permanent keys and cores shall be stamped with the applicable key mark for identification. The visual key control marks or codes shall not include the actual key cuts.

4) Permanent keys shall be stamped "Do Not Duplicate".

b. Furnish meeting notes and three compete, typed copies of keying and programming schedule to Owner for final review.

d. Furnish keying and programming schedule to Schlage manufacturing factory for production of cores, cylinders and other keyed devices.

3. Transmit pinned cores/cylinders as well as cut grand masterkeys, masterkeys, change keys and other security keys to Owner by Registered Mail, return receipt requested.

4. Install permanent cores in presence of Owner.

2.11 CLOSING DEVICE

A. Surface Mounted Closers:

1. Acceptable Manufacturers:
   a. LCN Manufacturing – 4040 XP Series as scheduled.
   b. Owner’s standard, no substitutions permitted.

B. Where hardware groups/sets have different information, refer to the following for clarification. Provide hardware groups/sets devices along with added devices as indicated on Drawings and detailed requirements for each type of device:

   1. ANSI A156.4, Grade 1; UL Listed; meets UL 10C and SFM Standard 12-7-4 for positive pressure fire test.

   2. Closers shall have multi-size spring power adjustment to permit setting of spring from 1 through 6 with additional spring power available. Provide ADA compliant setting nomenclature during submittals as recommended by closer manufacturer.

   3. Submit correct closer type as to be able to install closers on non–public side of doors (examples include but are not limited to 1) interior side of storage/electrical type rooms; 2) in corridors/public areas 3) stair side of stairway doors; and at exterior locations, install closers inside of building (in conditioned spaces)).

   4. Installation Plates, Brackets, and Miscellaneous Adapters:
      a. Existing Closer Covers: At door/opening locations where closer cover is missing, provide new closer cover.
      b. Provide drop plates, brackets, or adapters for arms as required to suit details and install as directed by manufacturer’s templates.

         1) Furnish and install drop plates at reverse bevel doors and at doors with 170 degrees to 180 degrees swing.
2) Furnish and install blade, angle or applied stops as required where frame does not permit installation of the standard soffit plate. See example below, field verify brackets and shims required before submittals, provide written language in submittals for how areas requiring special brackets.

<table>
<thead>
<tr>
<th>Example Special Bracket (for existing openings)</th>
<th>Coordinate the LCN part # will be compatible with the LNC closer and submit LCN or custom bracket as required</th>
</tr>
</thead>
<tbody>
<tr>
<td>PA SHOE ADAPTER, 4030-418</td>
<td>Provides horizontal mounting surface for parallel arm shoe on single rabatted or flush frame.</td>
</tr>
<tr>
<td>CUSH FLUSH PANEL ADAPTER, 4030-419</td>
<td>Provides horizontal mounting surface for CUSH shoe on single rabatted or flush frame.</td>
</tr>
</tbody>
</table>

2.12 AUTOMATIC OPERATORS
A. See Section 08 71 13.

2.13 STOPS AND HOLDERS
A. Floor Stops:
1. Acceptable Manufacturers:
   a. Ives Manufacturing.
   c. Rockwood.
   d. Hager Manufacturing.
   e. McKinney Products.
2. Where hardware groups/sets have different information, refer to the following for clarification. Provide hardware groups/sets devices along with added devices as indicated on Drawings and detailed requirements for each type of device:
   a. Stops, Bumpers and/or Holders shall meet the requirements of BHMA A156.16, Grade 1.
   b. Existing Door Stops:
      1) At door/opening where stops and/or holders are existing, uninstall existing stops and provide new door stops as specified in Part 3 "hardware set/groups":
      2) Fill holes from current or previous renovations (concrete as required, car bondo, and/or sand and paint (per Division 09 for paint and primer requirements).
      3) At door/opening locations where existing "kick down" type stops and holders are on existing doors (old Basis-of-Design: Trimco 1220 series), uninstall existing "kick down" type stops and provide new door stops.
2.14 ACCESSORIES

A. Kick/Mop Plates:
   1. Acceptable Manufacturers:
      a. Ives Manufacturing.
      c. Rockwood.
      d. Hager Manufacturing.
      e. McKinney Products.

B. Where hardware groups/sets have different information, refer to the following for clarification. Provide hardware groups/sets devices along with added devices as indicated on Drawings and detailed requirements for each type of device
   1. Size at single doors:
      a. Push side of door two inch less than door width. Hardware set/group nomenclature: 2 inches LDW.
      b. Pull side and one inch less than door width. Hardware set/group nomenclature: 1-inch LDW.
   2. At pairs of doors:
      a. Width shall be one inch less than door width unless doors have protective edge guards or center mullions.
   3. Height shall be 10 inches, unless otherwise indicated.
   4. At all rated doors (UL smoke or fire), furnish protection plates with engraved UL listing information (example: Trimco added part #ULS added to all kickplates specified below that are on UL or rated doors/openings).

C. Push/Pull Plates:
   1. Acceptable manufacturers.
      a. Ives Manufacturing.
      c. Rockwood.
      d. Hager Manufacturing.
      e. McKinney Products.

D. Lock Guards:
   1. Acceptable Manufacturers:
      a. Ives Manufacturing.
      c. Rockwood.
      d. Hager Manufacturing.
      e. McKinney Products.
E. Smoke Seals, Intumescent Seals, Sound Seals, and/or Weatherstripping.

1. Acceptable Manufacturers:
   a. Pemko Manufacturing, Inc.
   b. National Guard.
   d. McKinney Products.

2. No intumescent material is allowed on door frames. Where CBC requirements for positive pressure must be met, doors shall include all requirements as part of the door construction per 'Category A' guidelines as published by ITS/Warnock-Hersey. Only smoke gasketing applied around the perimeter of the frame to meet the 'S' smoke rating is permissible in instances where smoke control is required.

F. Light or Sound Seals:

1. Acceptable Manufacturers:
   b. National Guard.
   d. McKinney Products.

2. Where hardware groups/sets have different information, refer to the following for clarification. Provide hardware groups/sets devices along with added devices as indicated on Drawings and detailed requirements for each type of device:
   a. In the field cutting or notching of sound gasket hardware shall not be permitted.
   b. Submit and supply 29310CS or 350CSR type gasketing in lengths appropriate for template hardware. Examples below are not exhaustive; see hardware and door templating requirements.
      1) When rim-type exit/panic devices are used in conjunction with the 29310CS or 350CSR, order different lengths of 29310CS or 350CSR for latching side jamb to coordinate with -type exit/panic device, surface mounted latch. Do not install seal at roller-type latch location.
      2) When stop mounted overhead closer devices are used in conjunction with the 29310CS or 350CSR, provide the correct drop plates, brackets, and/or closer arms to not cut or notch the 29310CS or 350CSR. Provide full, header width of 29310CS or 350CSR type devices. Example: If a parallel arm closer is utilized then provide offset arms like those used for surface mounted overhead stops, drop plates, and brackets.

G. Door Silencers:

1. Acceptable Manufacturers:
   a. Ives Manufacturing.
   c. Rockwood.
   d. Hager Manufacturing.
   e. McKinney Products.
H. Astragals, Door Bottoms, and Thresholds:
   1. Acceptable Manufacturers:
      a. Pemko Manufacturing, Inc.
      b. National Guard Products (NGP).
      d. McKinney Products.
   2. Thresholds shall comply with CBC 2016 and shall not exceed 1/2 inch in height.
   3. Thresholds shall wrap frame stops (cut around stops, then continue into rabbits and face of frame).
      a. Whether or not specified below, where thresholds are larger than frames all thresholds to have beveled miter ends.
      b. 45-degree miter cut and a closed end, welded with returns to door/frame (example: NGP manufacturing nomenclature RCE throughout).

I. Drip Guard:
   1. Provide at exterior doors exposed to rain.
   2. Size: Full Frame Width (FFW).
   3. Provide devices painted to match adjacent frame. See Division 09 for paint and primer requirements.

J. Gates and Gate Hardware Accessories:
   1. Provide welded astragals, lock patches (templates), and/or welded mounting devices required for a complete installation of specified hardware, whether or not shown on Drawings and details. Weld in accordance with manufacturer's recommendations. Provide devices ground smooth and paint to match gate/fence system. See Section 09 91 00 for paint and primer requirements. Inserted pictures below are examples of lock patches and/or welded mounting devices. Template gates for each type of hardware device:
2. Gate Astragal:
   a. Provide fully welded astragal full height of gate to overlap either adjacent fence post or the adjacent gate at pair of gates.
      1) Provide full height astragal in width indicated on Drawings. If not indicated, provide astragal width no less than 2 inches wide. See inserted picture below.
      2) Provide full height astragal overlap width per details. If not indicated, provide overlap of astragal no less than 3/4 inch wide.
      3) Provide 1/8 inch astragal thickness. See inserted picture below.
      4) Where Pemko Manufacturing 357 Series astragal is utilized by gate manufacturer, do not use screws or order with screw holes. Nomenclature: ND prefix or suffix required by Pemko on 357 Series astragal.
   b. Provide devices ground smooth and painted to match gate/fence system. See Section 09 91 00 for paint and primer requirements.

3. Gate Cajnbolts:
   a. Where nomenclature or device “524 Series” non-padlock cainbolt-type devices are specified in hardware group/sets, provide by Crown Industrial, South San Francisco, CA; (650) 952-5150; http://www.crown-industrial.com/, or accepted equal.
   b. Where nomenclature or device “stock #0524PL and/or part #0000478” series padlockable cainbolt-type devices are specified in hardware group/sets, provide series by Crown Industrial, South San Francisco, CA; (650) 952-5150; http://www.crown-industrial.com/, or accepted equal.
   c. On pairs of gates that have egress lever trim and/or exit/panic device push-pad trim on active side gate, install cainbolt away from the door edge so that both the cainbolt and supplied the padlock cannot not impede the active gate from opening at any time, providing free egress.
   d. Provide compatible galvanized steel pipe cainbolt receptor and strike plate mounted in concrete slab as required.
      1) At padlockable cainbolts, provide sufficient cainbolt receptor depth to enable use of padlock.
      2) Provide cainbolt receptors at both closed position of gate and open position of gate at 90 degrees, unless shown differently on Drawings.
   e. Cainbolt shall be mounted and welded in accordance with manufacturer’s recommendations.
      1) Coordinate with other welding requirements in Contract Documents.
      2) Provide devices ground smooth and painted to match gate/fence system. See Section 09 91 00 for paint and primer requirements.
   f. Products by the following manufacturers will be considered for acceptance providing all specified criteria have been met in full. Furnish all items and components of hardware required to complete the work in accordance with specifications, Contract Documents, and intended operation.
2. Ameristar.
3) Monumental Iron Works.

2.15 POWER SUPPLIES, ELECTRIFIED HARDWARE, AND WIRES

A. The “Request-to-Exit” feature as described below is a security feature that announces / tells the security system if occupants is leaving the building interior area and similar to a motion-sensor the “Request-to-Exit” switch or device does not affect egress of the doors (unless noted, all doors in hardware group/sets are free egress at all times with no special knowledge to exit).

B. Door Position Switches

1. Door position switch is written in hardware sets to be coordination “place-holders”. Do not order final door position switches, but prepare doors and frames as follows: Door and frame supplier shall coordinate doors and frames to accept door position switch devices that are accepted during the submittals. Doors and frames shall be delivered to jobsite with door position switch cuts/preparations. Final switches shall be provided and installed in pre-cut frame and door head by security vendor. Coordinate with Divisions 25-28 and applicable plans.

C. Power Supplies, Wires, and Relays:

1. Where hardware groups/sets have different information (number of hinge wires and power supply information), refer to the following specifications for clarification and submit according to complete and intended electrified system per Contract Documents.

a. Provide required connections to accommodate fire alarm/life safety system and/or security electronics for remote site monitoring of all electrified components and functions.

b. For all electric strike locations, provide HES “SmartPac III” In-Line Power Control or accepted equal product meeting specified requirements.

c. If Von Duprin panic devices are used:

1) E996 = PS902 1-3, PS902 4R 1-4, PS904 4 RL 1-4 and or with e-strike also.

2) QEL = PS902 2 RS 1-2, PS904 4 RL 1-2 with A/O, PS904 4 RL 1-4, PS906 (2) 4 RL up to 4-8

3) NEW CX = 1 PS902, 2 PS904, 3-4 PS906

4) EL = PS914 2 RS 1-2, PS914 4 RL 1-2 w/ A/O , PS914 4 RL 1-4

5) E-strike = PS904 8 F 1-8 or PS904 8 P 1-8

d. If Command Access LPM180 are used:

1) Command Access #PS220. This PS220B could power up to two locksets near each-other. Verify the correct power supply and furnish install as required and coordinated with Electrical and Security.

e. At all doors with 24VDC electric locking devices, in addition to what is specified below, provide the following tasks and devices in pricing/cost. Final to be selected and credit if required:
Power Supply Task 1
- If Existing, Site Power 24VDC Supply Is To Be Utilized:

Verify if an existing power supply or if the same power supply that runs the card reader unit can power the 24VDC lockset specified above. Typically, there is an existing power supply in an “Information Technology or IT closet” that can power the locking device. See below for new device if required.

Power Supply Task 2
- If New Power Supply Is Required:

If there is not an existing power supply that can power the locking device, furnish and install #1) single gang power drop located above or near door (not in corridor or public view, but above ceiling line where possible); #2) provide power supply # AQ-D-2-4-F-1-R-2 x Securitron manufacturing; #3) run conduit from middle hinge through frame and complete wiring as required to meet manufacturer warranties (locks, hinges, and power supply manufacturer warranty).

D. Electronic Keyswitch Devices:

1. Acceptable Manufacturers:
   b. Securitron.
   c. SDC.
   d. Camden Door Controls.

PART 3  EXECUTION

3.1  EXAMINATION

A. Examine doors and frames and verify mounting locations as indicated on shop drawings.

B. Report unacceptable conditions to the Architect. Begin installation only when unacceptable conditions have been corrected.

C. Existing doors and frames: Examine existing doors and frames scheduled for hardware replacement. Provide hardware necessary for completion of the work to conform with the intent of this Section as to quality, function, and code compliance.

3.2  INSTALLATION

A. Install in accordance with manufacturer’s printed instructions and approved shop drawings.

B. Door-Floor Clearances:

1. Unless otherwise shown, provide the following door-floor clearances:
   a. Labeled doors: 3/8 inch maximum over floor or threshold.
   b. No threshold: 3/8 inch maximum for metal and wood doors.
   c. With threshold: 1/8 inch.
   d. Carpet: 1/8 inch over top of nap.
2. Undercut doors so that the sweeps still fit tight against the sill or threshold condition, but as the door opens and sweeps away from sill or threshold, the door bottoms do not rub on the floor. Metal installation parts of door bottoms are typically part of the door assembly and only the gap between the metal part and sill/threshold are seen as the undercut. Means and methods: coordinate as required for door and hardware with finish floors, toppings, thresholds and performance ratings.

C. Hardware Placement:

1. Unless otherwise shown or required by CBC 2016, ADA Act - 2010 Standards for Accessible Design and/or Title 24, place hardware at the following heights:
   a. Hinges: Door and frame manufacturer's standard or existing location scope per additional specifications and plans.
   b. Lever handles for latchsets, lockset and panic/exit device pull, lever trim:
      1) 38 inches above finish floor/surface.
      2) At existing openings, lever hardware shall be so mounted / centered between 36 inches and 44 inches above finished floor or ground.
      3) Verify manufacturer's template with door design.
      4) Verify in field site templates for existing doors and frames before submittals, provide written language in submittals for how areas requiring retrofit will be installed to meet CBC 2016.
   c. Panic devices push bar:
      1) Panic hardware shall be so mounted / centered between 36 inches and 44 inches above finished floor or ground.
      2) Verify manufacturer's template with door design to meet CBC 2016 exterior, pull side trim.
      3) Verify in field site templates for existing doors and frames before submittals, provide written language in submittals for how areas requiring retrofit will be installed to meet CBC 2016.
   d. Door Pulls and Push Bars (centerline): mounted / centered 42 inches above finished floor or ground.
   e. Door Push Plates (centerline): mounted / centered 42 inches above finished floor or ground.

2. Hardware for door handles, pulls, latches, locks and other operating devices for use on means of egress doors shall comply with SFM Standard 12-10-2, Section 12-10-202 as contained in CCR Title 24, Part 12.

D. Installation:

1. Except for hinges, do not install hardware until painting and finishing work is completed.
2. Pre-drill pilot holes in wood for screws. Drill and tap for surface mounted hardware on metal.
4. Locksets: Install locks with keyways in proper position. Install levers, roses, and escutcheons firmly affixed.
5. Closers:
   a. To open and latch smoke or fire rated doors correctly (positive latch at all times for rated doors when door is not in use), install closer units per factory templates to meet manufacturer requirements.
   b. To meet non-rated opening/exterior opening force requirements as well as close and latch non-smoke non-fire rated doors:
      1) Closers are to be installed as close to the hinge side of door as possible by a trained installer per this Section, Part 1 “Quality Assurance, Installer Qualifications”, installer an authorized representative of manufacturers, minimum of five years successful experience installing closers to meet 5-pound opening force for non-rated door complexity”.
      2) For non-smoke or non-fire rated doors, before installation of closers install one mockup door for each kind of closer application. Example: parallel, regular arm, stop arm and/or top-jamb arm application if specified. Confirm doors meet 5-pound opening force and still close door. This will ensure proper installation for doors to open at 5 pounds opening force before remaining non-rated opening closers are installed.
   c. Mount door closers for maximum swing but at non-rated doors to meet 5-pound opening force. At all possible openings, mount door closers for maximum swing of door before setting stops.
   d. Mount door closers for maximum swing, but at non-rated doors to meet 5-pound opening force. Drawings may show doors open to only 90 degrees (Revit or CAD system set up), but unless noted or specified with limiter (stop arm devices below), all doors to open for maximum swing against adjacent 180 wall if nothing inhibits door from doing so. Include wide-throw hinges per specs and installation for 170 degree to 180 degree or maximum swing of door before installing stops.

6. Floor Stops: Floor stops shall be installed a maximum of 4 inches from adjacent walls.

7. Auto Door Bottom (411 or 420 series as typically specified) to not be adjusted until substantial completion. Door bottoms are to be raised to highest position while construction occurs (so to not have rubber seal torn or damaged by debris under the door). At substantial completion, adjust door bottom to fully engage and touch the floor for proper sound dampening.

8. Silencers: Set in place before adjusting strikes.

9. Thresholds and Raindrips: Set in waterproof sealant and fasten anchors in pre-drilled countersunk holes 18 inch on center maximum spacing and within 3 inches of each end. Minimum three anchors per threshold.

10. Examine existing openings (frames and/or doors) scheduled for hardware replacement or refurbishment: Where hardware groups/sets have different information, refer to the following for clarification.
    a. Provide hardware groups/sets devices along with added devices as indicated on drawings and detailed requirements for each type of device including, but not limited to, requirements in the above specification language, architectural plans, door schedule pages, door details pages and/or full specification documents.
b. Frame may have bent out of "plumb, square and true": Shim and adjust doors to swing per manufacturer’s recommendations "plumb, square and true". Provide hardware necessary for completion of the work to conform with the intent of this Section as to quality, function and code compliance.

c. Uninstall hardware at existing doors and do not re-install new or old hardware until painting and finishing work is completed.

d. Where either #1) new doors are to be installed at existing frames or #2) existing doors and frame are to remain, the new mounting heights for latching devices may not align with the existing hardware preparations/templating:
   1) Prepare openings to accept the new hardware including, but not limited to, new hinges, strikes and strike location, and/or additional hardware required.
   2) Verify in field existing hanging/hinge requirements for installation. See specifications and manufacturer’s printed instructions.
      a) Where continuous hinges are installed in place of butt-type hinges, fill abandoned hinge openings/preps in the existing frames with device #HF-45 or SHF-45 per below:
      b) Furnish and install correct sized shims and filler plates: sized to either Don Jo device #HF-45 or SHF-45 or size as required for each opening.
   3) Verify in field existing closers requirements for installation. See specifications and manufacturer’s printed instructions.
   4) Verify in field existing locking device requirements for installation. See specifications and manufacturer’s printed instructions.
      a) Verify in field existing strikes. Provide and install new ANSI 4-7/8 inch or standard 2-3/4 inch strikes to match existing frame preparation/template unless indicated in hardware group sets below or if “Unit-type” locks and latchsets were previously installed.
      b) Where “Unit-type” locks and latchsets where previously installed, as part of Contract, provide labor and material to retrofit “Unit-type” lock and latchset strikes: At these locations new strikes to be cut in and become ANSI 4-7/8 inch strikes. Standard 2-3/4 inch strikes will be considered for cylindrical devices on rated doors.
      c) At exit/panic device locations, provide new strikes as required for hardware latching systems.
   5) Where CBC 2016 does not inhibit the re-use of doors and frames, fill abandoned openings/preparations in the existing openings.
      a) At non-rated openings (non-smoke or non-fire doors), fill abandoned holes and penetrations with project specific wood blocks and or like gauge metal shim, fill with project compliant bondo, grind/sand smooth surface smooth, and prime/paint (see Section 09 91 00 for paint and primer requirements).
      b) At smoke or fire hollow metal doors and frames fill abandoned holes and penetrations (no greater than 1/2 inch) with project specific like gauge metal and/or flat through-bolts by Fire Door Solutions manufacturing or equal Install in accordance with manufacturer’s printed instructions (see http://www.firedoorsolutions.com/wp-content/uploads/2013/03/Fire-Door-Thru-Bolt-Instructions.pdf ).
c) At wood doors with abandoned holes, furnish and install fire door caulking by Fire Door Solutions manufacturing or equal (see http://www.firedoorsolutions.com/category/fire-door-caulk/). Install in accordance with manufacturer’s printed instructions as well as UL/Intertek fire/smoke test requirements (see http://www.firedoorsolutions.com/wp-content/uploads/2013/03/fire-door-caulk-listing-manufacturing-report.pdf).

d) Drilling of existing doors for electrified-wire runs to electrified locking systems to be performed by a certified Warnock-Hershey or Intertek door and hardware installer:

(1) At rated door applications a Warnock-Hershey/Intertek certified business (http://www.intertek.com/marks/wh/) to verify in field ability to make penetrations in frame and/or drill doors.

(2) Installer to be a Warnock-Hershey/Intertek certified business (http://www.intertek.com/marks/wh/) for cutting and drilling doors for wire runs through the center of the fire rated doors (run wires from electrified hinge to the electric locking devices and then re-rate/re-label fire or smoke rated doors and frames.

e) After modifications and/or rehabilitation of fire or smoke or rated openings re-certify door and frame labels through an approved UL listed agency (Intertek or equal recertification representative: Intertek re-certification company information: Intertek main phone number 800-967-5352 web: www.intertek-etlsemko.com

3.3 PAINT OR FIELD FINISHES

A. Coordinate with Contact Documents including, but not limited to Section 09 91 00 for paint and primer requirements.

B. Fire rated labels on doors and frames shall not be painted.

3.4 ADJUSTING

A. Adjust parts for smooth, uniform operation.

B. Lubricate moving parts with manufacturer recommended lubricant.

C. Replace units that cannot be adjusted and lubricated to operate freely and smoothly as intended for the application.

D. Adjust door closer devices:

1. Adjust closer operating.

   a. Interior and Exterior Doors: not to exceed 5.0 pounds force.

   b. When fire doors are required, the maximum effort to operate the door may be increased to the minimum allowed by the appropriate administrative authority, not to exceed 15 pounds opening force.

2. Adjust closer delay and operating speeds to comply with requirements of CBC 2016 Section 11B-404.2.8.1 and ADA – Americans with Disabilities Act - 2010 Standards for Accessible Design.

   a. Doors/gates closers, when provided, shall have sweep period adjusted: minimum of 5 seconds for a door/gate to close from the 90 degree position to the 12 degree position.
3.5 CLEANING

A. Clean as recommended by manufacturer. Do not use materials or methods which may damage finish or surrounding construction.

3.6 HARDWARE SCHEDULE

A. Manufacturers Legend:

<table>
<thead>
<tr>
<th>Code</th>
<th>Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>IV</td>
<td>H.B. Ives</td>
</tr>
<tr>
<td>SC</td>
<td>Schlage</td>
</tr>
<tr>
<td>VO</td>
<td>Von Duprin</td>
</tr>
<tr>
<td>LC</td>
<td>LCN Closers</td>
</tr>
<tr>
<td>MA</td>
<td>Markar</td>
</tr>
<tr>
<td>MC</td>
<td>McKinney</td>
</tr>
<tr>
<td>PE</td>
<td>Pemko</td>
</tr>
<tr>
<td>TR</td>
<td>Trimco</td>
</tr>
<tr>
<td>AD</td>
<td>Adams Rite</td>
</tr>
<tr>
<td>RX</td>
<td>Rixson</td>
</tr>
<tr>
<td>CR</td>
<td>Crown Industrial Manufacturing</td>
</tr>
<tr>
<td>SN</td>
<td>Securitron</td>
</tr>
<tr>
<td>LO</td>
<td>Locinox Manufacturing</td>
</tr>
</tbody>
</table>

B. The “Request-to-Exit” feature as described below is a security feature that announces/tells the security system if occupant is leaving the building interior area and similar to a motion-sensor the “Request-to-Exit” switch or device does not affect egress of the doors (unless noted, all doors in hardware group/sets are free egress at all times with no special knowledge to exit).

C. Hardware Columns - Example (Legend):

<table>
<thead>
<tr>
<th>Qty</th>
<th>Device Description</th>
<th>Device # (include specification language)</th>
<th>Finish</th>
<th>Manu</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

D. The following hardware sets are intended to establish type and standard of quality when used together with the requirements of this Section. See above Section and related Sections including Division 01.

1. Examine Contract Documents and furnish proper hardware for door openings.

2. Refer to Door Schedule on the Drawings for Hardware Group/Set assignments for each opening.

3. Blank space below and after a Group/Set is intentional to avoid, if possible, splitting a Hardware Group/Set onto two pages.
## Exterior Hardware Sets (Two-Digit Set Numbers)

### Hardware Group/Set #01

In addition to the devices specified in hardware group/set below, also coordinate devices in specification Section 08 71 13 “Automatic Door Operators” and Electrical. Furnish and install doors, frames and related scope per complete Contract Documents.

<table>
<thead>
<tr>
<th>Quantity</th>
<th>Description</th>
<th>Model/Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>Ea. Hinge</td>
<td>T4A3386 5” tall x NRP (width size and quantity per Section 08 71 00)</td>
</tr>
<tr>
<td>2</td>
<td>Ea. Electrified Power Transfer</td>
<td>CEPT</td>
</tr>
<tr>
<td>1</td>
<td>Ea. Keyed Removable Mullion</td>
<td>KR4954 (HM or AL series as required)</td>
</tr>
<tr>
<td>1</td>
<td>Ea. Mullion Storage Kit</td>
<td>MT54</td>
</tr>
<tr>
<td>1</td>
<td>Ea. Rim-Type Exit/Panic Device x Key Override</td>
<td>SD RX EL AX PA 99L-NL x 110NL</td>
</tr>
<tr>
<td>1</td>
<td>Ea. Rim-Type Exit/Panic Device</td>
<td>SD RX EL AX PA 99EO</td>
</tr>
<tr>
<td>2</td>
<td>Ea. Pulls</td>
<td>1185 SO x full height pull (length to be determined by the following: top of pull starts 4” below top of door, bottom of pull 12” AFF) x E x 1 (.5” 630 no insert) x 630. Insert so that 1185 does not interfere with keyed, cylinder(s)</td>
</tr>
<tr>
<td>4</td>
<td>Ea. Primus I/C Cylinders (Rim or Mortise)</td>
<td>20-757 or 20-763 x appropriate cam x blocking rings as required (rim or mortise type and quantity as required by locking device)</td>
</tr>
<tr>
<td>4</td>
<td>Ea. Permanent Core</td>
<td>20-740</td>
</tr>
<tr>
<td>2</td>
<td>Ea. Overhead Low Energy Operator System</td>
<td>See Section 08 71 13</td>
</tr>
<tr>
<td>1</td>
<td>Ea. Cylinder and Keying for Electrified On-Off Keyswitch (device in Section 08 71 13 “Automatic Door Operators”)</td>
<td>20-757 or 20-763 x appropriate cam x blocking rings as required (rim or mortise type and quantity as required by locking device)</td>
</tr>
<tr>
<td>1</td>
<td>Ea. Section 08 71 13 Permanent Core</td>
<td>20-740</td>
</tr>
<tr>
<td>2</td>
<td>Ea. Floor Stop</td>
<td>7280</td>
</tr>
<tr>
<td>1</td>
<td>Ea. Mullion Seal</td>
<td>5110BL</td>
</tr>
<tr>
<td>2</td>
<td>Ea. Door Bottom Sweep</td>
<td>90100CNB</td>
</tr>
<tr>
<td>1</td>
<td>Ea. Threshold</td>
<td>2727A or 176A or per detail (sized to fit the</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Quantity</th>
<th>Description</th>
<th>Model/Type</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
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<tr>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td><strong>1 Ea.</strong></td>
<td>Power Supplies</td>
<td>PS914 2 RS (if not connected to auto operator) or PS914 4 RL (if auto operator in hardware set) either as required per door application/function</td>
</tr>
<tr>
<td><strong>2 Ea.</strong></td>
<td>Request to Exit Device (see free egress note in above specifications)</td>
<td>Specified in above locking hardware (coordinate with Divisions 25-28 and applicable drawings).</td>
</tr>
<tr>
<td><strong>2 Ea.</strong></td>
<td>Door Position Switch (also known as Alarm Contacts)</td>
<td>Prep/Template door and frame only if DPS devices are specified by security (coordinate door and frame preparation/templates for DPS devices ordered and installed by Divisions 25-28 and applicable drawings).</td>
</tr>
<tr>
<td><strong>1 Ea.</strong></td>
<td>At exterior-side of building furnish and install single-gang, keyswitch as required to turn off exterior #Ingress'r.</td>
<td>#653-14 DPDT maintained single direction x SF-626 by Locknetics manufacturing.</td>
</tr>
<tr>
<td><strong>1 Ea.</strong></td>
<td>At interior-side of building furnish and install single-gang, keyswitch as required so that it &quot;locks down&quot; perimeter of this door to meet CBC Sections 1010.1.9 through 1010.1.11.</td>
<td>#653-14 DPDT maintained single direction x SF-626 by Locknetics manufacturing. In case of emergency as described in CBC Sections 1010.1.9 through 1010.1.11 coordinate and verify key-switch #653-14 DPDT shall drop power to auto operator and locking system (part of system to lock exterior-side of doors without going outside to lock the door).</td>
</tr>
</tbody>
</table>
|   | Coordinate with electrical design for locations and additional non-Section 08 71 00 scope (including but not limited to wire / connectivity from ground or ceiling through frame to electrified devices) | By electrical as required per Contract Documents:  
- Coordinate with electrical design for locations and wire/connectivity scope (non-Section 08 71 13, see Divisions 25-28 and applicable drawings).  
- Coordinate with single gang, electrical keyed cylinders in Section 08 71 13 “Automatic Door Operators” to meet CBC Sections 1010.1.9 through 1010.1.11 systems (lock down operation from interior). |

**NOTE 1** – coordination for interior two-way switch on/off station to lock down doors: During building emergency, an interior, two-way switch on/off station is to be provided to drop power to panic devices (locking doors) and exterior side auto operator actuator for no entrance into building by un-authorized occupants (coordinate integration with power supplies and auto operator system). Coordinate with Electrical/Security Divisions 25-28 and applicable plans.

**NOTE 2:** Balance of perimeter seals and meeting stiles by door manufacturer. Furnish and install all devices and components for hardware groups/set above in accordance with Contract Documents (including but not limited to additional hardware devices required in specifications language above, architectural plans and full specification documents).
<table>
<thead>
<tr>
<th>Hardware Group/Set #02</th>
<th>Description</th>
<th>Quantity</th>
<th>Model/Part Number</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Ea.</td>
<td>Hinge</td>
<td></td>
<td>T4A3386 5&quot; tall x NRP (width size and quantity per Section 08 71 00)</td>
<td>630 MC</td>
</tr>
<tr>
<td>2 Ea.</td>
<td>Electrified Power Transfer</td>
<td></td>
<td>CEPT</td>
<td>630 SN</td>
</tr>
<tr>
<td>1 Ea.</td>
<td>Keyed Removable Mullion</td>
<td></td>
<td>KR4954 (HM or AL series as required)</td>
<td>SP2 8 VO</td>
</tr>
<tr>
<td>1 Ea.</td>
<td>Mullion Storage Kit</td>
<td></td>
<td>MT54</td>
<td>VO</td>
</tr>
<tr>
<td>2 Ea.</td>
<td>Rim-Type Exit/Panic Device</td>
<td></td>
<td>SD RX EL AX PA 99EO</td>
<td>626 VO</td>
</tr>
<tr>
<td>2 Ea.</td>
<td>Pulls</td>
<td></td>
<td>1185 SO x full height pull (length to be determined by the following: top of pull starts 4&quot; below top of door, bottom of pull 12&quot; AFF) x E x 1 (.5&quot; 630 no insert) x 630.</td>
<td>630 TR</td>
</tr>
<tr>
<td>1 Ea.</td>
<td>Primus I/C Cylinders (Rim or Mortise)</td>
<td></td>
<td>20-757 or 20-763 x appropriate cam x blocking rings as required (rim or mortise type and quantity as required by locking device)</td>
<td>626 SC</td>
</tr>
<tr>
<td>1 Ea.</td>
<td>Permanent Core</td>
<td></td>
<td>20-740</td>
<td>626 SC</td>
</tr>
<tr>
<td>2 Ea.</td>
<td>Closer</td>
<td></td>
<td>4040 XP EDA</td>
<td>689 LC</td>
</tr>
<tr>
<td>2 Ea.</td>
<td>Concealed Overhead Stops</td>
<td></td>
<td>1ADJ Series (size -336 or as required by door width)</td>
<td>630 RX</td>
</tr>
<tr>
<td>1 Ea.</td>
<td>Mullion Seal</td>
<td></td>
<td>5110BL</td>
<td>PE</td>
</tr>
<tr>
<td>2 Ea.</td>
<td>Door Bottom Sweep</td>
<td></td>
<td>90100CNB</td>
<td>PE</td>
</tr>
<tr>
<td>1 Ea.</td>
<td>Threshold</td>
<td></td>
<td>2727A or 176A or per detail (sized to fit the condition)</td>
<td>PE</td>
</tr>
<tr>
<td>1 Ea.</td>
<td>Power Supplies</td>
<td></td>
<td>PS914 2 RS (if not connected to auto operator) or PS914 4 RL (if auto operator in hardware set) either as required per door application/function</td>
<td>VO</td>
</tr>
<tr>
<td>2 Ea.</td>
<td>Request to Exit Device</td>
<td></td>
<td>Specified in above locking hardware (coordinate with Divisions 25-28 and applicable drawings).</td>
<td></td>
</tr>
<tr>
<td>2 Ea.</td>
<td>Door Position Switch (also known as Alarm Contacts)</td>
<td></td>
<td>Prep/Template door and frame only if DPS devices are specified by security (coordinate door and frame preparation/templates for DPS devices ordered and installed by Divisions 25-28 and applicable drawings)</td>
<td></td>
</tr>
<tr>
<td>1 Ea.</td>
<td>At interior-side of building furnish and install single-gang, keyswitch as required so that it &quot;locks down&quot; perimeter of this door to meet CBC Sections 1010.1.9 through 1010.1.11.</td>
<td></td>
<td>#653-14 DPDT maintained single direction x SF-626 by Locknetics manufacturing. In case of emergency as described in CBC Section 1010.1.9 through 1010.1.11 coordinate and verify key-switch #653-14 DPDT shall drop power locking system (part of system to lock exterior-side of doors without going outside to lock the door).</td>
<td></td>
</tr>
<tr>
<td>1 Ea.</td>
<td>Cylinder and Keying for Electrified On-Off Keyswitch (device in Section 08 71 13 &quot;Automatic Door</td>
<td></td>
<td>20-757 or 20-763 x appropriate cam x blocking rings as required (rim or mortise type and quantity as required by locking device)</td>
<td>626 SC</td>
</tr>
<tr>
<td></td>
<td>Operators”</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>----</td>
<td>------------</td>
<td>----</td>
<td>----</td>
<td></td>
</tr>
<tr>
<td>1 Ea.</td>
<td>Section 08 71 13 Permanent Core</td>
<td>20-740</td>
<td>626 SC</td>
<td></td>
</tr>
</tbody>
</table>
| 1 Ea. | Coordinate with electrical design for locations and additional non-Section 08 71 00 scope (including but not limited to wire / connectivity from ground or ceiling through frame to electrified devices) | By electrical as required per Contract Documents:  
- Coordinate with electrical design for locations and wire/connectivity scope (non-Section 08 71 13, see Divisions 25-28 and applicable drawings).  
- Coordinate with single gang, electrical keyed cylinders in Section 08 71 13 “Automatic Door Operators” to meet CBC Sections 1010.1.9 through 1010.1.11 systems (lock down operation from interior). |

NOTE 1 – coordination for interior two-way switch on/off station to lock down doors: During building emergency, an interior, two-way switch on/off station is to be provided to drop power to locking doors for no entrance into building by un-authorized occupants (coordinate integration with power supplies and auto operator system). Coordinate with Electrical/Security Divisions 25-28 and applicable plans.

NOTE 2: Balance of perimeter seals and meeting stiles by door manufacturer. Furnish and install all devices and components for hardware groups/set above in accordance with Contract Documents (including but not limited to additional hardware devices required in specifications language above, architectural plans and full specification documents).
<table>
<thead>
<tr>
<th>Quantity</th>
<th>Description</th>
<th>Model/Specification</th>
<th>Width</th>
<th>Height</th>
<th>Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Hinge</td>
<td>T4A3386 5&quot; tall x NRP (width size and quantity per Section 08 71 00)</td>
<td>630</td>
<td>MC</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Electrified Power Transfer</td>
<td>CEPT</td>
<td>630</td>
<td>SN</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Rim-Type Exit/Panic Device x Key Override</td>
<td>SD RX EL AX PA 99L-NL x 110NL</td>
<td>626</td>
<td>VO</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Pulls</td>
<td>1185 SO x full height pull (length to be determined by the following: top of pull starts 4&quot; below top of door, bottom of pull 12&quot; AFF) x E x 1 (.5&quot; 630 no insert) x 630. Insert so that 1185 does not interfere with keyed, cylinder(s)</td>
<td>630</td>
<td>TR</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Primus I/C Cylinders (Rim or Mortise)</td>
<td>20-757 or 20-763 x appropriate cam x blocking rings as required (rim or mortise type and quantity as required by locking device)</td>
<td>626</td>
<td>SC</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Overhead Low Energy Operator System</td>
<td>See Section 08 71 13</td>
<td>626</td>
<td>SC</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Cylinder and Keying for Electrified On-Off Keyswitch (device in 08 71 13 “Automatic Door Operators”)</td>
<td>20-757 or 20-763 x appropriate cam x blocking rings as required (rim or mortise type and quantity as required by locking device)</td>
<td>626</td>
<td>SC</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Section 08 71 13 Permanent Core</td>
<td>20-740</td>
<td>626</td>
<td>SC</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Floor Stop</td>
<td>7280</td>
<td>630</td>
<td>TR</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Door Bottom Sweep</td>
<td>90100CNB</td>
<td>630</td>
<td>TR</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Threshold</td>
<td>2727A or 176A or per detail (sized to fit the condition)</td>
<td>2727A</td>
<td>PE</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Power Supplies</td>
<td>PS914 2 RS (if not connected to auto operator) or PS914 4 RL (if auto operator in hardware set) either as required per door application/function</td>
<td>PE</td>
<td>VO</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Request to Exit Device (see free egress note in above specifications)</td>
<td>Specified in above locking hardware (coordinate with Divisions 25-28 and applicable drawings).</td>
<td>VO</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Door Position Switch (also known as Alarm Contacts)</td>
<td>Prep/Template door and frame only if DPS devices are specified by security (coordinate door and frame preparation/templates for DPS devices ordered and installed by Divisions 25-28 and applicable drawings)</td>
<td>VO</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>At exterior-side of building furnish and install single-gang, keyswitch as required to turn off exterior #Ingress'.</td>
<td>#653-14 DPDT maintained single direction x SF-626 by Locknetics manufacturing.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>At interior-side of</td>
<td>#653-14 DPDT maintained single direction x SF-626 by Locknetics manufacturing.</td>
<td>653</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Item</td>
<td>Description</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>------</td>
<td>-------------</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>1 Ea.</strong></td>
<td>Coordinate with electrical design for locations and additional non-Section 08 71 00 scope (including but not limited to wire / connectivity from ground or ceiling through frame to electrified devices)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>By electrical as required per Contract Documents:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Coordinate with electrical design for locations and wire/connectivity scope (non-Section 08 71 13, see Divisions 25-28 and applicable drawings).</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Coordinate with single gang, electrical keyed cylinders in Section 08 71 13 “Automatic Door Operators” to meet CBC Sections 1010.1.9 through 1010.1.11 systems (lock down operation from interior).</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**NOTE 1** – coordination for interior two-way switch on/off station to lock down doors: During building emergency, an interior, two-way switch on/off station is to be provided to drop power to panic devices (locking doors) and exterior side auto operator actuator for no entrance into building by un-authorized occupants (coordinate integration with power supplies and auto operator system). Coordinate with Electrical/Security Divisions 25-28 and applicable plans.

**NOTE 2**: Balance of perimeter seals and meeting stiles by door manufacturer. Furnish and install all devices and components for hardware groups/set above in accordance with Contract Documents (including but not limited to additional hardware devices required in specifications language above, architectural plans and full specification documents).
### Hardware Group/Set #04

<table>
<thead>
<tr>
<th>Quantity</th>
<th>Description</th>
<th>Coordination and Instructions</th>
</tr>
</thead>
</table>
| 1 Ea.    | Door Position Switch (also known as Alarm Contacts)                                                                                           | Prep/Template door and frame only if DPS devices are specified by security (coordinate door and frame preparation/templates for DPS devices ordered and installed by Divisions 25-28 and applicable drawings).  
  
  #653-14 DPDT maintained single direction x SF-626 by Locknetics manufacturing. In case of emergency as described in CBC Sections 1010.1.9 through 1010.1.11 coordinate and verify key-switch #653-14 DPDT shall drop power locking system (part of system to lock exterior-side of doors without going outside to lock the door). |
| 1 Ea.    | Coordinate with existing electrical: At interior-side of building furnish and install single-gang, keyswitch as required so that it "locks down" perimeter of this door to meet CBC Sections 1010.1.9 through 1010.1.11. | By electrical as required per Contract Documents:  
  - Coordinate with electrical design for locations and wire/connectivity scope (non-Section 08 71 13, see Divisions 25-28 and applicable drawings).  
  - Coordinate with single gang, electrical keyed cylinders in Section 08 71 13 “Automatic Door Operators” to meet CBC Sections 1010.1.9 through 1010.1.11 systems (lock down operation from interior). |
| 1 Ea.    | Cylinder and Keying for Electrified On-Off Keyswitch                                                                                          | 20-757 or 20-763 x appropriate cam x blocking rings as required (rim or mortise type and quantity as required by locking device)                                                                                                                                                                                                                                                                         |
| 1 Ea.    | Electrified On-Off Keyswitch Permanent Core                                                                                                  | 20-740                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| 1 Ea.    | Coordinate with electrical for locations and additional non-Section 08 71 00 scope (including but not limited to wire / connectivity from ground or ceiling through frame to electrified devices) | NOTE 1 – coordination for interior two-way switch on/off station to lock down doors: During building emergency, an interior, two-way switch on/off station is to be provided to drop power to locking doors for no entrance into building by un-authorized occupants (coordinate integration with power supplies and auto operator system). Coordinate with Electrical/Security Divisions 25-28 and applicable plans.  
  
  NOTE 2 - remainder of work: Non-Section 08 71 00 tasks including, but not limited to Section 07 92 00 sealants and/or Section 09 91 00 prime/paint. Furnish scope in accordance with Contract Documents. Tasks/scope for painting when Section 08 71 00 hardware is adjacent to painted areas, doors or frames includes uninstalling hardware, painting/finish as required by other scope, then reinstall hardware according to manufacturer's original warranties and recommendations. |

*NOTE: SC stands for Single Gang.*
## Hardware Group/Set #05

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Section</th>
<th>Quantity</th>
<th>Part Number</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ea. Hinge</td>
<td>T4A3386 5” tall x NRP (width size and quantity per Section 08 71 00)</td>
<td>630 MC</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 Ea. Electrified Power Transfer</td>
<td>CEPT</td>
<td>630 SN</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 Ea. Keyed Removable Mullion</td>
<td>KR4954 (HM or AL series as required)</td>
<td>SP2 8</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 Ea. Mullion Storage Kit</td>
<td>MT54</td>
<td>VO</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 Ea. Rim-Type Exit/Panic Device x Key Override</td>
<td>SD RX EL AX PA 99L-NL x 110NL</td>
<td>626 VO</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 Ea. Rim-Type Exit/Panic Device</td>
<td>SD RX EL AX PA 99EO</td>
<td>626 VO</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 Ea. Power Supplies</td>
<td>PS914 2 RS (if not connected to auto operator) or PS914 4 RL (if auto operator in hardware set)</td>
<td>VO</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 Ea. Anti-Vandal Pulls</td>
<td>VR910NL series (coordinate with 99L-NL x 110NL)</td>
<td>630 IV</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 Ea. Anti-Vandal Pulls</td>
<td>VR910DT series</td>
<td>630 IV</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 Ea. Primus I/C Cylinders (Rim or Mortise)</td>
<td>20-757 or 20-763 x appropriate cam x blocking rings as required (rim or mortise type and quantity as required by locking device)</td>
<td>626 SC</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 Ea. Permanent Core</td>
<td>20-740</td>
<td>626 SC</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 Ea. Closer</td>
<td>4040 XP EDA</td>
<td>689 LC</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 Ea. Kick Plate</td>
<td>KO050 10” tall x 2” LDW (less door width) x B4E (beveled edges) x counter sunk where door allows</td>
<td>630 TR</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 Ea. Stop</td>
<td>1209</td>
<td>630 TR</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 Ea. Seals</td>
<td>S88D seals (head and jambs) by Pemko or approved seal manufacturer.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 Ea. Mullion Seal</td>
<td>5110BL by Pemko or approved seal manufacturer.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 Ea. Door Bottom Sweep</td>
<td>315CN by Pemko or approved seal manufacturer.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 Ea. Threshold</td>
<td>Threshold #2727A x 2750A x special 16” wide (welded Pemko based per special detail) x wrap frame stops x beveled miter ends per specifications x mastic per specifications x by Pemko approved equal.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Diagram

[Diagram of door hardware components]

1 Ea. Rain Drip

Per architectural details and flashing at uncovered areas (or by door manufacturer to meet no water penetration warranties – verify before submittals). For hollow metal doors, provide 346C x FFW full raindrips by Pemko or approved equal.
<table>
<thead>
<tr>
<th>Quantity</th>
<th>Item Description</th>
<th>Specification/Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 Ea.</td>
<td>Request to Exit Device (see free egress note in above specifications)</td>
<td>Specified in above locking hardware (coordinate with Divisions 25-28 and applicable drawings).</td>
</tr>
<tr>
<td>2 Ea.</td>
<td>Door Position Switch (also known as Alarm Contacts)</td>
<td>Prep/Template door and frame only if DPS devices are specified by security (coordinate door and frame preparation/templates for DPS devices ordered and installed by Divisions 25-28 and applicable drawings).</td>
</tr>
<tr>
<td>1 Ea.</td>
<td>Coordinate with existing electrical: At interior-side of building furnish and install single-gang, keyswitch as required so that it &quot;locks down&quot; perimeter of this door to meet CBC Sections 1010.1.9 through 1010.1.11.</td>
<td>#653-14 DPDT maintained single direction x SF-626 by Locknetics manufacturing. In case of emergency as described in CBC Sections 1010.1.9 through 1010.1.11 coordinate and verify key-switch #653-14 DPDT shall drop power locking system (part of system to lock exterior-side of doors without going outside to lock the door).</td>
</tr>
<tr>
<td>1 Ea.</td>
<td>Cylinder and Keying for Electrified On-Off Keyswitch</td>
<td>20-757 or 20-763 x appropriate cam x blocking rings as required (rim or mortise type and quantity as required by locking device).</td>
</tr>
<tr>
<td>1 Ea.</td>
<td>Electrified On-Off Keyswitch Permanent Core</td>
<td>20-740</td>
</tr>
</tbody>
</table>
| 1 Ea.    | Coordinate with electrical for locations and additional non-Section 08 71 00 scope (including but not limited to wire / connectivity from ground or ceiling through frame to electrified devices) | By electrical as required per Contract Documents: 
- Coordinate with electrical design for locations and wire/connectivity scope (non-Section 08 71 13, see Divisions 25-28 and applicable drawings). 
- Coordinate with single gang, electrical keyed cylinders to meet CBC Sections 1010.1.9 through 1010.1.11 systems (lock down operation from interior). |

**NOTE 1** – coordination for interior two-way switch on/off station to lock down doors: During building emergency, an interior, two-way switch on/off station is to be provided to drop power to locking doors for no entrance into building by un-authorized occupants (coordinate integration with power supplies and auto operator system). Coordinate with Electrical/Security Divisions 25-28 and applicable plans.

**NOTE 2**: Furnish scope in accordance with Contract Documents. Tasks/scope for painting when Section 08 71 00 hardware s adjacent to painted areas, doors or frames includes uninstalling hardware, painting/finish as required by other scope, then reinstall hardware according to manufacturer’s original warranties and recommendations.
### Hardware Group/Set #06

<table>
<thead>
<tr>
<th>Description</th>
<th>Model</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hinge</td>
<td>T4A3386 5” tall x NRP (width size and quantity per Section 08 71 00)</td>
<td>630 MC</td>
</tr>
<tr>
<td>Electrified Power Transfer</td>
<td>CEPT</td>
<td>630 SN</td>
</tr>
<tr>
<td>Rim-Type Exit/Panic Device x Key Override</td>
<td>SD RX EL AX PA 99L-NL x 110NL</td>
<td>626 VO</td>
</tr>
<tr>
<td>Power Supplies</td>
<td>PS914 2 RS (if not connected to auto operator) or PS914 4 RL (if auto operator in hardware set) either as required per door application/function</td>
<td>VO</td>
</tr>
<tr>
<td>Anti-Vandal Pulls</td>
<td>VR910NL series (coordinate with 99L-NL x 110NL)</td>
<td>630 IV</td>
</tr>
<tr>
<td>Primus I/C Cylinders (Rim or Mortise)</td>
<td>20-757 or 20-763 x appropriate cam x blocking rings as required (rim or mortise type and quantity as required by locking device)</td>
<td>626 SC</td>
</tr>
<tr>
<td>Permanent Core</td>
<td>20-740</td>
<td>626 SC</td>
</tr>
<tr>
<td>Closer</td>
<td>4040 XP EDA</td>
<td>689 LC</td>
</tr>
<tr>
<td>Kick Plate</td>
<td>KO050 10” tall x 2” LDW (less door width) x B4E (beveled edges) x counter sunk where door allows</td>
<td>630 TR</td>
</tr>
<tr>
<td>Stop</td>
<td>1209</td>
<td>630 TR</td>
</tr>
<tr>
<td>Seals</td>
<td>S88D seals (head and jambs) by Pemko or approved seal manufacturer.</td>
<td></td>
</tr>
<tr>
<td>Door Bottom Sweep</td>
<td>315CN by Pemko or approved seal manufacturer.</td>
<td></td>
</tr>
<tr>
<td>Threshold</td>
<td>2727A or 176A or per existing detail (sized to fit the condition) by Pemko or approved seal manufacturer.</td>
<td></td>
</tr>
<tr>
<td>Rain Drip</td>
<td>Per architectural details and flashing at uncovered areas (or by door manufacturer to meet no water penetration warranties – verify before submittals). For hollow metal doors, provide 346C x FFW full raindrips by Pemko or approved equal</td>
<td></td>
</tr>
<tr>
<td>Request to Exit Device (see free egress note in above specifications)</td>
<td>Specified in above locking hardware (coordinate with divisions 25-28 and applicable drawings).</td>
<td></td>
</tr>
<tr>
<td>Door Position Switch (also known as Alarm Contacts)</td>
<td>Prep/Template door and frame only if DPS devices are specified by security (coordinate door and frame preparation/templates for DPS devices ordered and installed by Divisions 25-28 and applicable drawings)</td>
<td></td>
</tr>
<tr>
<td>Coordinate with existing electrical: At interior-side of building furnish and install single-gang, keyswitch as required so that it &quot;locks down&quot; perimeter of this door to meet CBC Sections 1010.1.9 through 1010.1.11.</td>
<td>#653-14 DPDT maintained single direction x SF-626 by Locknetics manufacturing. In case of emergency as described in CBC Sections 1010.1.9 through 1010.1.11 coordinate and verify key-switch #653-14 DPDT shall drop power locking system (part of system to lock exterior-side of doors without going outside to lock the door).</td>
<td></td>
</tr>
<tr>
<td>Cylinder and Keying for Electrified On-Off Keyswitch</td>
<td>20-757 or 20-763 x appropriate cam x blocking rings as required (rim or mortise type and quantity as required by locking device)</td>
<td>626 SC</td>
</tr>
<tr>
<td>Electrified On-Off</td>
<td>20-740</td>
<td>626 SC</td>
</tr>
<tr>
<td></td>
<td>Keyswitch Permanent Core</td>
<td>By electrical as required per Contract Documents:</td>
</tr>
<tr>
<td>---</td>
<td>-------------------------</td>
<td>--------------------------------------------------</td>
</tr>
<tr>
<td>1</td>
<td>Ea.</td>
<td>- Coordinate with electrical design for locations and wire/connectivity scope (non-Section 08 71 13, see Divisions 25-28 and applicable drawings).</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Coordinate with single gang, electrical keyed cylinders to meet CBC Sections 1010.1.9 through 1010.1.11 systems (lock down operation from interior).</td>
</tr>
</tbody>
</table>

NOTE 1 – coordination for interior two-way switch on/off station to lock down doors: During building emergency, an interior, two-way switch on/off station is to be provided to drop power to locking doors for no entrance into building by un-authorized occupants (coordinate integration with power supplies and auto operator system). Coordinate with Electrical/Security Divisions 25-28 and applicable plans.

NOTE 2: Furnish scope in accordance with Contract Documents. Tasks/scope for painting when Section 08 71 00 hardware is adjacent to painted areas, doors or frames includes uninstalling hardware, painting/finish as required by other scope, then reinstall hardware according to manufacturer’s original warranties and recommendations.
# Hardware Group/Set #07 – final to be selected

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Model/Manufacturer</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Ea.</td>
<td>Hinge</td>
<td>T4A3386 5&quot; tall x NRP (width size and quantity per Section 08 71 00)</td>
<td>630 MC</td>
</tr>
<tr>
<td>1 Ea.</td>
<td>Electrified Power Transfer</td>
<td>CEPT</td>
<td>630 SN</td>
</tr>
<tr>
<td>1 Ea.</td>
<td>Rim-Type Exit/Panic Device x Key Override</td>
<td>SD RX EL AX PA 99L-NL x 110NL</td>
<td>626 VO</td>
</tr>
<tr>
<td>1 Ea.</td>
<td>Power Supplies</td>
<td>PS914 2 RS (if not connected to auto operator) or PS914 4 RL (if auto operator in hardware set) either as required per door application/function</td>
<td>VO</td>
</tr>
<tr>
<td>1 Ea.</td>
<td>Anti-Vandal Pulls</td>
<td>VR910NL series (coordinate with 99L-NL x 110NL)</td>
<td>630 IV</td>
</tr>
<tr>
<td>1 Ea.</td>
<td>Primus I/C Cylinders (Rim or Mortise)</td>
<td>20-757 or 20-763 x appropriate cam x blocking rings as required (rim or mortise type and quantity as required by locking device)</td>
<td>626 SC</td>
</tr>
<tr>
<td>1 Ea.</td>
<td>Permanent Core</td>
<td>20-740</td>
<td>626 SC</td>
</tr>
<tr>
<td>1 Ea.</td>
<td>Closer</td>
<td>4040 XP EDA</td>
<td>689 LC</td>
</tr>
<tr>
<td>1 Ea.</td>
<td>Kick Plate</td>
<td>KO050 10&quot; tall x 2&quot; LDW (less door width) x B4E (beveled edges) x counter sunk where door allows</td>
<td>630 TR</td>
</tr>
<tr>
<td>1 Ea.</td>
<td>Stop</td>
<td>1209</td>
<td>630 TR</td>
</tr>
<tr>
<td>1 Ea.</td>
<td>Seals</td>
<td>S88D seals (head and jambs) by Pemko or approved seal manufacturer.</td>
<td></td>
</tr>
<tr>
<td>1 Ea.</td>
<td>Door Bottom Sweep</td>
<td>315CN by Pemko or approved seal manufacturer.</td>
<td></td>
</tr>
<tr>
<td>1 Ea.</td>
<td>Threshold</td>
<td>2727A or 176A or per existing detail (sized to fit the condition) by Pemko or approved seal manufacturer.</td>
<td></td>
</tr>
<tr>
<td>1 Ea.</td>
<td>Rain Drip</td>
<td>Per architectural details and flashing at uncovered areas (or by door manufacturer to meet no water penetration warranties – verify before submittals). For hollow metal doors, provide 346C x FFW full raindrips by Pemko or approved equal</td>
<td></td>
</tr>
<tr>
<td>1 Ea.</td>
<td>Request to Exit Device (see free egress note in above specifications)</td>
<td>Specified in above locking hardware (coordinate with Divisions 25-28 and applicable drawings).</td>
<td></td>
</tr>
<tr>
<td>1 Ea.</td>
<td>Door Position Switch (also known as Alarm Contacts)</td>
<td>Prep/Template door and frame only if DPS devices are specified by security (coordinate door and frame preparation/templates for DPS devices ordered and installed by Divisions 25-28 and applicable drawings)</td>
<td></td>
</tr>
<tr>
<td>1 Ea.</td>
<td>Coordinate with existing electrical: At interior-side of building furnish and install single-gang, keyswitch as required so that it &quot;locks down&quot; perimeter of this door to meet CBC Sections 1010.1.9 through 1010.1.11.</td>
<td>#653-14 DPDT maintained single direction x SF-626 by Locknetics manufacturing. In case of emergency as described in CBC Sections 1010.1.9 through 1010.1.11 coordinate and verify key-switch #653-14 DPDT shall drop power locking system (part of system to lock exterior-side of doors without going outside to lock the door).</td>
<td></td>
</tr>
<tr>
<td>1 Ea.</td>
<td>Cylinder and Keying for Electrified On-Off Keyswitch</td>
<td>20-757 or 20-763 x appropriate cam x blocking rings as required (rim or mortise type and quantity as required by locking device)</td>
<td>626 SC</td>
</tr>
<tr>
<td>1 Ea.</td>
<td>Electrified On-Off</td>
<td>20-740</td>
<td>626 SC</td>
</tr>
<tr>
<td></td>
<td>Keyswitch Permanent Core</td>
<td></td>
<td></td>
</tr>
<tr>
<td>-----</td>
<td>----------------------------------------------------------------------------------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Ea. Coordinate with electrical for locations and additional non-Section 08 71 00 scope (including but not limited to wire / connectivity from ground or ceiling through frame to electrified devices)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

By electrical as required per Contract Documents:
- Coordinate with electrical design for locations and wire/connectivity scope (non-Section 08 71 13, see Divisions 25-28 and applicable drawings).
- Coordinate with single gang, electrical keyed cylinders to meet CBC Sections 1010.1.9 through 1010.1.11 systems (lock down operation from interior).

**NOTE 1** – coordination for interior two-way switch on/off station to lock down doors: During building emergency, an interior, two-way switch on/off station is to be provided to drop power to locking doors for no entrance into building by un-authorized occupants (coordinate integration with power supplies and auto operator system). Coordinate with Electrical/Security Divisions 25-28 and applicable plans.

**NOTE 2:** Furnish scope in accordance with Contract Documents. Tasks/scope for painting when Section 08 71 00 hardware s adjacent to painted areas, doors or frames includes uninstalling hardware, painting/finish as required by other scope, then reinstall hardware according to manufacturer’s original warranties and recommendations.
## Hardware Group/Set #08

<table>
<thead>
<tr>
<th>Quantity</th>
<th>Item Description</th>
<th>Model/Part Number</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Ea.</td>
<td>Hinge</td>
<td>T4A3386 5&quot; tall x NRP (width size and quantity per Section 08 71 00)</td>
<td>630 MC</td>
</tr>
<tr>
<td>1 Ea.</td>
<td>Electrified Hinge</td>
<td>T4A3386 5&quot; tall x 8-wire x 5&quot; tall x NRP (width size and quantity per 08 7100)</td>
<td>630 MC</td>
</tr>
<tr>
<td>1 Ea.</td>
<td>Electrified Lockset</td>
<td>L9092T EU x 06A RX</td>
<td>630 SC</td>
</tr>
<tr>
<td>1 Ea.</td>
<td>Power Supplies</td>
<td>Per 087100, Part 3 and note below for full specification requirements</td>
<td></td>
</tr>
<tr>
<td>1 Ea.</td>
<td>Primus I/C Cylinders (Rim or Mortise)</td>
<td>20-757 or 20-763 x appropriate cam x blocking rings as required (rim or mortise type and quantity as required by locking device)</td>
<td>626 SC</td>
</tr>
<tr>
<td>1 Ea.</td>
<td>Permanent Core</td>
<td>20-740</td>
<td>626 SC</td>
</tr>
<tr>
<td>1 Ea.</td>
<td>Closer</td>
<td>4040 XP EDA</td>
<td>689 LC</td>
</tr>
<tr>
<td>1 Ea.</td>
<td>Kick Plate</td>
<td>KO050 10&quot; tall x 2&quot; LDW (less door width) x B4E (beveled edges) x counter sunk where door allows</td>
<td>630 TR</td>
</tr>
<tr>
<td>1 Ea.</td>
<td>Stop</td>
<td>1209</td>
<td>630 TR</td>
</tr>
<tr>
<td>1 Ea.</td>
<td>Seals</td>
<td>S88D seals (head and jambs) by Pemko or approved seal manufacturer.</td>
<td></td>
</tr>
<tr>
<td>1 Ea.</td>
<td>Door Bottom Sweep</td>
<td>315CN by Pemko or approved seal manufacturer.</td>
<td></td>
</tr>
<tr>
<td>1 Ea.</td>
<td>Threshold</td>
<td>2727A or 176A or per existing detail (sized to fit the condition) by Pemko or approved seal manufacturer.</td>
<td></td>
</tr>
<tr>
<td>1 Ea.</td>
<td>Rain Drip</td>
<td>Per architectural details and flashing at uncovered areas (or by door manufacturer to meet no water penetration warranties – verify before submittals). For hollow metal doors, provide 346C x FFW full raindrips by Pemko or approved equal</td>
<td></td>
</tr>
<tr>
<td>1 Ea.</td>
<td>Request to Exit Device (see free egress note in above specifications)</td>
<td>Specified in above locking hardware (coordinate with Divisions 25-28 and applicable drawings).</td>
<td></td>
</tr>
<tr>
<td>1 Ea.</td>
<td>Door Position Switch (also known as Alarm Contacts)</td>
<td>Prep/Template door and frame only if DPS devices are specified by security (coordinate door and frame preparation/templates for DPS devices ordered and installed by Divisions 25-28 and applicable drawings)</td>
<td></td>
</tr>
<tr>
<td>1 Ea.</td>
<td>Coordinate with existing electrical: At interior-side of building furnish and install single-gang, keyswitch as required so that it &quot;locks down&quot; perimeter of this door to meet CBC Sections 1010.1.9 through 1010.1.11.</td>
<td>#653-14 DPDT maintained single direction x SF-626 by Locknetics manufacturing. In case of emergency as described in CBC Sections 1010.1.9 through 1010.1.11 coordinate and verify key-switch #653-14 DPDT shall drop power locking system (part of system to lock exterior-side of doors without going outside to lock the door).</td>
<td></td>
</tr>
<tr>
<td>1 Ea.</td>
<td>Cylinder and Keying for Electrified On-Off Keyswitch</td>
<td>20-757 or 20-763 x appropriate cam x blocking rings as required (rim or mortise type and quantity as required by locking device)</td>
<td>626 SC</td>
</tr>
<tr>
<td>1 Ea.</td>
<td>Electrified On-Off Keyswitch Permanent Core</td>
<td>20-740</td>
<td>626 SC</td>
</tr>
</tbody>
</table>
| 1 | Ea. | Coordinate with electrical for locations and additional non-Section 08 71 00 scope (including but not limited to wire / connectivity from ground or ceiling through frame to electrified devices) | By electrical as required per Contract Documents:  
- Coordinate with electrical design for locations and wire/connectivity scope (non-Section 08 71 13, see Divisions 25-28 and applicable drawings).  
- Coordinate with single gang, electrical keyed cylinders to meet CBC Sections 1010.1.9 through 1010.1.11 systems (lock down operation from interior). |
| 1 | Ea. | Non-Section 08 71 00 access control panel interface modules and system to run electrified trim | By Electrical/Security (coordinate with Divisions 25-28 and applicable plans – scope includes but not limited to wire and connectivity from ceiling to electrified trim as required by non-Section 08 71 00 access control system) |

**NOTE 1** – coordination for interior two-way switch on/off station to lock down doors: During building emergency, an interior, two-way switch on/off station is to be provided to drop power to locking doors for no entrance into building by un-authorized occupants (coordinate integration with power supplies and auto operator system). Coordinate with Electrical/Security Divisions 25-28 and applicable plans.  
**NOTE 2:** Furnish scope in accordance with Contract Documents. Tasks/scope for painting when Section 08 71 00 hardware s adjacent to painted areas, doors or frames includes uninstalling hardware, painting/finish as required by other scope, then reinstall hardware according to manufacturer’s original warranties and recommendations.
<table>
<thead>
<tr>
<th>Hardware Group/Set #09</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>-</strong></td>
</tr>
<tr>
<td><strong>08 71 00</strong></td>
</tr>
<tr>
<td><strong>-</strong></td>
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<tr>
<td><strong>1</strong></td>
</tr>
<tr>
<td><strong>1</strong></td>
</tr>
<tr>
<td>Description</td>
</tr>
<tr>
<td>----------------------------------------------------------------------------</td>
</tr>
</tbody>
</table>
| for locations and additional non-Section 08 71 00 scope                    | - Coordinate with electrical design for locations and wire/connectivity scope (non-Section 08 71 13, see Divisions 25-28 and applicable drawings).  
- Coordinate with single gang, electrical keyed cylinders to meet CBC Sections 1010.1.9 through 1010.1.11 systems (lock down operation from interior). |
| 1 Ea. Non-Section 08 71 00 access control panel interface modules and system to run electrified trim | By Electrical/Security (coordinate with Divisions 25-28 and applicable plans – scope includes but not limited to wire and connectivity from ceiling to electrified trim as required by non-Section 08 71 00 access control system) |

**NOTE 1** – Coordination for interior two-way switch on/off station to lock down doors: During building emergency, an interior, two-way switch on/off station is to be provided to drop power to locking doors for no entrance into building by un-authorized occupants (coordinate integration with power supplies and auto operator system). Coordinate with Electrical/Security Divisions 25-28 and applicable plans.

**NOTE 2**: Furnish scope in accordance with Contract Documents. Tasks/scope for painting when Section 08 71 00 hardware is adjacent to painted areas, doors or frames includes uninstalling hardware, painting/finish as required by other scope, then reinstall hardware according to manufacturer's original warranties and recommendations.
## Hardware Group/Set #10

<table>
<thead>
<tr>
<th>Item Description</th>
<th>Quantity</th>
<th>Model/Part Numbers</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Ea. Hinge T4A3386 x NRP (size and quantity per Section 08 71 00)</td>
<td></td>
<td>630 MC</td>
</tr>
<tr>
<td>1 Ea. Electrified Hinge T4A3386 8-wire NRP (size and quantity per Section 08 71 00)</td>
<td></td>
<td>630 MC</td>
</tr>
<tr>
<td>1 Ea. Electrified Lockset L9092T EU x 06A RX</td>
<td></td>
<td>630 SC</td>
</tr>
<tr>
<td>1 Ea. Power Supplies Per Section 08 71 00, Part 3 and note below for full specification requirements</td>
<td></td>
<td>630 SC</td>
</tr>
<tr>
<td>1 Ea. Primus I/C Cylinders (Rim or Mortise) 20-757 or 20-763 x appropriate cam x blocking rings as required (rim or mortise type and quantity as required by locking device)</td>
<td></td>
<td>626 SC</td>
</tr>
<tr>
<td>1 Ea. Permanent Core 20-740</td>
<td></td>
<td>626 SC</td>
</tr>
<tr>
<td>1 Ea. Closer x Stop Arm at 90-degrees 4040 XP CUSH</td>
<td></td>
<td>689 LC</td>
</tr>
<tr>
<td>1 Ea. Kick Plate KO050 10&quot; tall x 2&quot; LDW (less door width) x B4E (beveled edges) x counter sunk where door allows</td>
<td></td>
<td>630 TR</td>
</tr>
<tr>
<td>1 Ea. Stop 1209</td>
<td></td>
<td>630 TR</td>
</tr>
<tr>
<td>1 Ea. Seals S88D seals (head and jambs) by Pemko or approved seal manufacturer.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 Ea. Door Bottom Sweep 315CN by Pemko or approved seal manufacturer.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 Ea. Threshold 2727A or 176A or per existing detail (sized to fit the condition) by Pemko or approved seal manufacturer.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 Ea. Rain Drip Per architectural details and flashing at uncovered areas (or by door manufacturer to meet no water penetration warranties – verify before submittals). For hollow metal doors, provide 346C x FFW full raindrips by Pemko or approved equal</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 Ea. Request to Exit Device Specified in above locking hardware (coordinate with Divisions 25-28 and applicable drawings). (see free egress note in above specifications)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 Ea. Door Position Switch Prep/Template door and frame only if DPS devices are specified by security (coordinate door and frame preparation/templates for DPS devices ordered and installed by Divisions 25-28 and applicable drawings) (also known as Alarm Contacts)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 Ea. Coordinate with existing electrical: At interior-side of building furnish and install single-gang, keyswitch as required so that it &quot;locks down&quot; perimeter of this door to meet CBC Sections 1010.1.9 through 1010.1.11. #653-14 DPDT maintained single direction x SF-626 by Locknetics manufacturing. In case of emergency as described in CBC Sections 1010.1.9 through 1010.1.11 coordinate and verify key-switch #653-14 DPDT shall drop power locking system (part of system to lock exterior-side of doors without going outside to lock the door).</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 Ea. Cylinder and Keying for Electrified On-Off Keyswitch</td>
<td></td>
<td>626 SC</td>
</tr>
<tr>
<td>1 Ea. Electrified On-Off Keyswitch Permanent Core 20-740</td>
<td></td>
<td>626 SC</td>
</tr>
</tbody>
</table>
1 Ea. Coordinate with electrical for locations and additional non-Section 08 71 00 scope (including but not limited to wire / connectivity from ground or ceiling through frame to electrified devices)

By electrical as required per Contract Documents:
- Coordinate with electrical design for locations and wire/connectivity scope (non-Section 08 71 13, see Divisions 25-28 and applicable drawings).
- Coordinate with single gang, electrical keyed cylinders to meet CBC Sections 1010.1.9 through 1010.1.11 systems (lock down operation from interior).

1 Ea. Non-Section 08 71 00 access control panel interface modules and system to run electrified trim

By Electrical/Security (coordinate with Divisions 25-28 and applicable plans – scope includes but not limited to wire and connectivity from ceiling to electrified trim as required by non-Section 08 71 00 access control system)

NOTE 1 – coordination for interior two-way switch on/off station to lock down doors: During building emergency, an interior, two-way switch on/off station is to be provided to drop power to locking doors for no entrance into building by un-authorized occupants (coordinate integration with power supplies and auto operator system). Coordinate with Electrical/Security Divisions 25-28 and applicable plans.

NOTE 2: Furnish scope in accordance with Contract Documents. Tasks/scope for painting when Section 08 71 00 hardware s adjacent to painted areas, doors or frames includes uninstalling hardware, painting/finish as required by other scope, then reinstall hardware according to manufacturer’s original warranties and recommendations.
# Hardware Group/Set #11

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Quantity</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>- Ea.</strong></td>
<td>Hinge</td>
<td>T4A3386 x NRP (size and quantity per Section 08 71 00)</td>
<td>630 MC</td>
</tr>
<tr>
<td>1 Ea.</td>
<td>Electrified Hinge</td>
<td>T4A3386 8-wire NRP (size and quantity per Section 08 71 00)</td>
<td>630 MC</td>
</tr>
<tr>
<td>1 Ea.</td>
<td>Electrified Lockset</td>
<td>L9092T EU x 06A RX</td>
<td>630 SC</td>
</tr>
<tr>
<td>1 Ea.</td>
<td>Power Supplies</td>
<td>Per Section 08 71 00, Part 3 and note below for full specification requirements</td>
<td>630 SC</td>
</tr>
<tr>
<td>1 Ea.</td>
<td>Primus I/C Cylinders (Rim or Mortise)</td>
<td>20-757 or 20-763 x appropriate cam x blocking rings as required (rim or mortise type and quantity as required by locking device)</td>
<td>626 SC</td>
</tr>
<tr>
<td>1 Ea.</td>
<td>Permanent Core</td>
<td>20-740</td>
<td>626 SC</td>
</tr>
<tr>
<td>1 Ea.</td>
<td>Closer x Stop Arm at 90-degrees</td>
<td>4040 XP CUSH</td>
<td>689 LC</td>
</tr>
<tr>
<td>1 Ea.</td>
<td>Kick Plate</td>
<td>KO050 10&quot; tall x 2&quot; LDW (less door width) x B4E (beveled edges) x counter sunk where door allows</td>
<td>630 TR</td>
</tr>
<tr>
<td>1 Ea.</td>
<td>Stop</td>
<td>1209</td>
<td>630 TR</td>
</tr>
<tr>
<td>1 Ea.</td>
<td>Seals</td>
<td>S88D seals (head and jambs) by Pemko or approved seal manufacturer.</td>
<td></td>
</tr>
<tr>
<td>1 Ea.</td>
<td>Door Bottom Sweep</td>
<td>315CN by Pemko or approved seal manufacturer.</td>
<td></td>
</tr>
<tr>
<td>1 Ea.</td>
<td>Threshold</td>
<td>2727A or 176A or per existing detail (sized to fit the condition) by Pemko or approved seal manufacturer.</td>
<td></td>
</tr>
<tr>
<td>1 Ea.</td>
<td>Rain Drip</td>
<td>Per architectural details and flashing at uncovered areas (or by door manufacturer to meet no water penetration warranties – verify before submittals). For hollow metal doors, provide 346C x FFW full raindrips by Pemko or approved equal</td>
<td></td>
</tr>
<tr>
<td>1 Ea.</td>
<td>Request to Exit Device (see free egress note in above specifications)</td>
<td>Specified in above locking hardware (coordinate with Divisions 25-28 and applicable drawings).</td>
<td></td>
</tr>
<tr>
<td>1 Ea.</td>
<td>Door Position Switch (also known as Alarm Contacts)</td>
<td>Prep/Template door and frame only if DPS devices are specified by security (coordinate door and frame preparation/templates for DPS devices ordered and installed by Divisions 25-28 and applicable drawings)</td>
<td></td>
</tr>
<tr>
<td>1 Ea.</td>
<td>Coordinate with existing electrical: At interior-side of building furnish and install single-gang, keyswitch as required so that it &quot;locks down&quot; perimeter of this door to meet CBC Sections 1010.1.9 through 1010.1.11.</td>
<td>#653-14 DPDT maintained single direction x SF-626 by Locknetics manufacturing. In case of emergency as described in CBC Sections 1010.1.9 through 1010.1.11 coordinate and verify key-switch #653-14 DPDT shall drop power locking system (part of system to lock exterior-side of doors without going outside to lock the door).</td>
<td></td>
</tr>
<tr>
<td>1 Ea.</td>
<td>Cylinder and Keying for Electrified On-Off Keyswitch</td>
<td>20-757 or 20-763 x appropriate cam x blocking rings as required (rim or mortise type and quantity as required by locking device)</td>
<td>626 SC</td>
</tr>
<tr>
<td>1 Ea.</td>
<td>Electrified On-Off Keyswitch Permanent Core</td>
<td>20-740</td>
<td>626 SC</td>
</tr>
<tr>
<td>Quantity</td>
<td>Description</td>
<td>Details</td>
<td></td>
</tr>
<tr>
<td>----------</td>
<td>-----------------------------------------------------------------------------</td>
<td>--------------------------------------------------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Ea. Coordinate with electrical for locations and additional non-Section 08 71 00 scope (including but not limited to wire / connectivity from ground or ceiling through frame to electrified devices)</td>
<td>By electrical as required per Contract Documents:</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Coordinate with electrical design for locations and wire/connectivity scope (non-Section 08 71 13, see Divisions 25-28 and applicable drawings).</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Coordinate with single gang, electrical keyed cylinders to meet CBC Sections 1010.1.9 through 1010.1.11 systems (lock down operation from interior).</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Ea. Non-Section 08 71 00 access control panel interface modules and system to run electrified trim</td>
<td>By Electrical/Security (coordinate with Divisions 25-28 and applicable plans – scope includes but not limited to wire and connectivity from ceiling to electrified trim as required by non-Section 08 71 00 access control system)</td>
<td></td>
</tr>
</tbody>
</table>

**NOTE 1** – coordination for interior two-way switch on/off station to lock down doors: During building emergency, an interior, two-way switch on/off station is to be provided to drop power to locking doors for no entrance into building by un-authorized occupants (coordinate integration with power supplies and auto operator system). Coordinate with Electrical/Security Divisions 25-28 and applicable plans.

**NOTE 2**: Furnish scope in accordance with Contract Documents. Tasks/scope for painting when Section 08 71 00 hardware s adjacent to painted areas, doors or frames includes uninstalling hardware, painting/finish as required by other scope, then reinstall hardware according to manufacturer’s original warranties and recommendations.
## Hardware Group/Set #12

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Model</th>
<th>Notes</th>
</tr>
</thead>
</table>
| 6 Ea. | Hinges at existing frame conditions | T4A3386 heavy duty hinges or TA2314 medium duty hinges x 630 finish by McKinney manufacturing:  
- Verify in field existing frame preparation/templates and submit, furnish and install hinges to match existing frame.  
- Provide hinge width to enable door to open 175 degrees to hit stop. | 630 | MC |
| 1 Ea. | Inactive Leaf: Lockable Cain Bolt Receiver/Strike | 0524PL and/or part #0000478 x black zinc x Stainless Steel Ground Receiver/Strike | CR |
| 1 Ea. | Inactive Leaf: Padlock | By Owner | |
| 1 Ea. | Active Leaf: Classroom-Type, Double Keyed Security Lockset | ND95TD x RHO x 10-025 | SC |
| 1 Ea. | Permanent Core | 20-740 | SC |
| 1 Ea. | Latch Protector | 5001-T | SC |
| 2 Ea. | Kick Plate | KO050 10" tall x 2" LDW (less door width) x B4E (beveled edges) x counter sunk where door allows | TR |
| 2 Ea. | Door Stop | 1209 | TR |
| 1 Ea. | Seals | S88D (head and jambs) by Pemko or approved manufacturer. | |
| 2 Ea. | Door Bottom Sweep | 315CN by Pemko or approved manufacturer. | |
| 1 Ea. | Threshold | Replace in kind if 1/2" tall condition or provide 2727A or 176A or per existing detail (sized to fit the condition) by Pemko or approved seal manufacturer. | |
| 1 Ea. | Rain Drip | Per architectural details and flashing at uncovered areas (or by door manufacturer to meet no water penetration warranties – verify before submittals). For hollow metal doors, provide 346C x FFW full raindrips by Pemko or approved equal | |

**NOTE** - Furnish and install all devices and components for hardware groups/set above in accordance with Contract Documents (including but not limited to additional hardware devices required in specifications language above, architectural plans and full specification documents).
## Hardware Group/Set #13

<table>
<thead>
<tr>
<th>Quantity</th>
<th>Description</th>
<th>Details</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>Gate Hinge/Hanging Devices</td>
<td>Precision Engineered High Capacity Hinges # CBW875-HD Series (quantity per specifications and manufacturer’s recommendations)</td>
<td>CR</td>
</tr>
<tr>
<td>2</td>
<td>Lockable Cainbolt-Type Devices</td>
<td>0524PL and/or part #0000478 x 24”x black zinc x Stainless Steel Ground Receiver/Strike</td>
<td>CR</td>
</tr>
<tr>
<td>2</td>
<td>Padlocks</td>
<td>KS43F320 (2” inch shackle)</td>
<td>SC</td>
</tr>
<tr>
<td>2</td>
<td>Permanent Cores</td>
<td>20-740</td>
<td>626 SC</td>
</tr>
<tr>
<td>2</td>
<td>Floor Stops and Holders</td>
<td>1804</td>
<td>630 AB</td>
</tr>
<tr>
<td>1</td>
<td>Full Height Astragal</td>
<td>Per specifications (utilized as a positive stop – when gate closes against the astragals the opening cannot swing back in toward the egress side)</td>
<td>Painted</td>
</tr>
<tr>
<td>1</td>
<td>Knox Box</td>
<td>3200 Series (per specifications) and for locations as shown on Architectural Drawings (Recessed mount, UL-listed, heavy-duty unit; fabricate from 1/4-inch-thick steel plate with restricted keying as required by Local Fire Department)</td>
<td></td>
</tr>
</tbody>
</table>

NOTE: Furnish all devices and components for hardware groups/set above in accordance with Contract Documents (including but not limited to additional hardware devices required in Section 08 71 00 language, architectural plans and full specification documents).

## Hardware Group/Set #14

<table>
<thead>
<tr>
<th>Quantity</th>
<th>Description</th>
<th>Details</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>Gate Hinge/Hanging Devices</td>
<td>Precision Engineered High Capacity Hinges # CBW875-HD Series (quantity per specifications and manufacturer’s recommendations)</td>
<td>CR</td>
</tr>
<tr>
<td>1</td>
<td>Inactive Leaf Lockable Cainbolt-Type Devices</td>
<td>0524PL and/or part #0000478 x 24”x black zinc x Stainless Steel Ground Receiver/Strike</td>
<td>CR</td>
</tr>
<tr>
<td>1</td>
<td>Inactive Leaf Padlock</td>
<td>KS43F320 (2” inch shackle)</td>
<td>SC</td>
</tr>
<tr>
<td>1</td>
<td>Mortise-Type Exit/Panic Device – NL</td>
<td>9975NL-OP mounted with SNB</td>
<td>626 VO</td>
</tr>
<tr>
<td>1</td>
<td>Anti-Vandal Pulls</td>
<td>VR910NL series (coordinate with 9975NL-OP)</td>
<td>630 IV</td>
</tr>
<tr>
<td>1</td>
<td>Primus I/C Cylinders (Rim or Mortise)</td>
<td>20-757 or 20-763 x appropriate cam x blocking rings as required (rim or mortise type and quantity as required by locking device)</td>
<td>626 SC</td>
</tr>
<tr>
<td>1</td>
<td>Padlock and Exit/Panic Device Permanent Cores</td>
<td>20-740</td>
<td>626 SC</td>
</tr>
<tr>
<td>2</td>
<td>Floor Stops and Holders</td>
<td>1804</td>
<td>630 AB</td>
</tr>
<tr>
<td>1</td>
<td>Full Height Astragal</td>
<td>Per specifications (utilized as a positive stop – when gate closes against the astragals the opening cannot swing back in toward the egress side)</td>
<td>Painted</td>
</tr>
<tr>
<td>4</td>
<td>Bottom of doors to be greater than 10” Clear, Unobstructed and Smooth Surface</td>
<td>Both sides of gates by gate manufacturer (ground smooth, primed and painted to match gate).</td>
<td></td>
</tr>
</tbody>
</table>

NOTE: Furnish all devices and components for hardware groups/set above in accordance with Contract Documents (including but not limited to additional hardware devices required in Section 08 71 00 language, architectural plans and full specification documents).
### Hardware Group/Set #15

<table>
<thead>
<tr>
<th>1</th>
<th>Set</th>
<th>Hydraulic Closers / Hinges Set</th>
<th>Mammoth 180-Degree Hydraulic Closers/Hinges Set x Black Finish</th>
<th>LO</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Ea.</td>
<td>Mortise-Type Exit/Panic Device – NL</td>
<td>9975NL-OP mounted with SNB</td>
<td>626 VO</td>
</tr>
<tr>
<td>1</td>
<td>Ea.</td>
<td>Anti-Vandal Pulls</td>
<td>VR910NL series (coordinate with 9975NL-OP)</td>
<td>630 IV</td>
</tr>
<tr>
<td>1</td>
<td>Ea.</td>
<td>Primus I/C Cylinders (Rim or Mortise)</td>
<td>20-757 or 20-763 x appropriate cam x blocking rings as required (rim or mortise type and quantity as required by locking device)</td>
<td>626 SC</td>
</tr>
<tr>
<td>1</td>
<td>Ea.</td>
<td>Floor Stops and Holder</td>
<td>1804</td>
<td>630 AB</td>
</tr>
<tr>
<td>1</td>
<td>Ea.</td>
<td>Full Height Astragal</td>
<td>Per specifications (utilized as a positive stop – when gate closes against the astragals the opening cannot swing back in toward the egress side)</td>
<td>Painted</td>
</tr>
<tr>
<td>2</td>
<td>Ea.</td>
<td>Bottom of doors to be greater than 10” Clear, Unobstructed and Smooth Surface</td>
<td>Both sides of gates by gate manufacturer (ground smooth, primed and painted to match gate)</td>
<td>Painted</td>
</tr>
</tbody>
</table>

NOTE: Furnish all devices and components for hardware groups/set above in accordance with Contract Documents (including but not limited to additional hardware devices required in Section 08 71 00 language, architectural plans and full specification documents).

### Hardware Group/Set #16

<table>
<thead>
<tr>
<th>1</th>
<th>Set</th>
<th>Hydraulic Closers / Hinges Set</th>
<th>Mammoth 180-Degree Hydraulic Closers/Hinges Set x Black Finish</th>
<th>LO</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Ea.</td>
<td>Storeroom Lockset</td>
<td>L9080T x 06A</td>
<td>626 SC</td>
</tr>
<tr>
<td>1</td>
<td>Ea.</td>
<td>Primus I/C Cylinders (Rim or Mortise)</td>
<td>20-757 or 20-763 x appropriate cam x blocking rings as required (rim or mortise type and quantity as required by locking device)</td>
<td>626 SC</td>
</tr>
<tr>
<td>1</td>
<td>Ea.</td>
<td>Floor Stops and Holder</td>
<td>1804</td>
<td>630 AB</td>
</tr>
<tr>
<td>1</td>
<td>Ea.</td>
<td>Full Height Astragal</td>
<td>Per specifications (utilized as a positive stop – when gate closes against the astragals the opening cannot swing back in toward the egress side)</td>
<td>Painted</td>
</tr>
<tr>
<td>2</td>
<td>Ea.</td>
<td>Bottom of doors to be greater than 10” Clear, Unobstructed and Smooth Surface</td>
<td>Both sides of gates by gate manufacturer (ground smooth, primed and painted to match gate)</td>
<td>Painted</td>
</tr>
</tbody>
</table>

NOTE: Furnish all devices and components for hardware groups/set above in accordance with Contract Documents (including but not limited to additional hardware devices required in Section 08 71 00 language, architectural plans and full specification documents).
**Interior Hardware Sets (Three-Digit Set Numbers)**

### Hardware Group/Set #101

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Model/Part Number</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>-</td>
<td>Ea. Hinge</td>
<td>T4A3386 5” tall x NRP (width size and quantity per Section 08 71.00)</td>
<td>630 MC</td>
</tr>
<tr>
<td>1</td>
<td>Ea. Keyed Removable Mullion</td>
<td>KR4954 (HM or AL series as required)</td>
<td>SP28 VO</td>
</tr>
<tr>
<td>1</td>
<td>Ea. Mullion Storage Kit</td>
<td>MT54</td>
<td>VO</td>
</tr>
<tr>
<td>1</td>
<td>Ea. Rim-Type Exit/Panic Device x Key Override</td>
<td>CDSI AX PA 99L-NL x 110NL</td>
<td>626 VO</td>
</tr>
<tr>
<td>1</td>
<td>Ea. Rim-Type Exit/Panic Device</td>
<td>CDSI AX PA 99EO</td>
<td>626 VO</td>
</tr>
<tr>
<td>2</td>
<td>Ea. Pulls</td>
<td>1185 SO x full height pull (length to be determined by the following: top of pull starts 4” below top of door, bottom of pull 12” AFF) x E x 1 (.5” 630 no insert) x 630.</td>
<td>630 TR</td>
</tr>
<tr>
<td>4</td>
<td>Ea. Primus I/C Cylinders (Rim or Mortise)</td>
<td>20-757 or 20-763 x appropriate cam x blocking rings as required (rim or mortise type and quantity as required by locking device)</td>
<td>626 SC</td>
</tr>
<tr>
<td>4</td>
<td>Ea. Permanent Core</td>
<td>20-740</td>
<td>626 SC</td>
</tr>
<tr>
<td>2</td>
<td>Ea. Closer</td>
<td>4040 XP EDA</td>
<td>689 LC</td>
</tr>
<tr>
<td>2</td>
<td>Ea. Concealed Overhead Stops</td>
<td>1ADJ Series (size -336 or as required by door width)</td>
<td>630 RX</td>
</tr>
<tr>
<td>1</td>
<td>Ea. Mullion Seal</td>
<td>5110BL x by Pemko approved equal</td>
<td>PE</td>
</tr>
<tr>
<td>1</td>
<td>Ea. Threshold</td>
<td>Threshold #2749A x 2749A special 16” wide (welded Pemko based per special detail) x wrap frame stops x beveled miter ends per specifications x mastic per specifications x by Pemko approved equal</td>
<td></td>
</tr>
</tbody>
</table>

**NOTE 1:** Balance of perimeter seals and meeting stiles by door manufacturer.

**NOTE 2:** Furnish and install all devices and components for hardware groups/set above in accordance with Contract Documents (including but not limited to additional hardware devices required in specifications language above, architectural plans and full specification documents).
### Hardware Group/Set #102

<table>
<thead>
<tr>
<th>Item Description</th>
<th>Model/Part Number</th>
<th>Quantity</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Hinge</strong></td>
<td>T4A3386</td>
<td>630</td>
<td>MC</td>
</tr>
<tr>
<td><strong>Electrified Power Transfer</strong></td>
<td>CEPT</td>
<td>630</td>
<td>SN</td>
</tr>
<tr>
<td><strong>Keyed Removable Mullion</strong></td>
<td>KR4954 (HM or AL series as required)</td>
<td>8</td>
<td>SP2</td>
</tr>
<tr>
<td><strong>Mullion Storage Kit</strong></td>
<td>MT54</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Rim-Type Exit/Panic Device x Electrified Lever and Key Override</strong></td>
<td>RX AX PA 99L x E996L</td>
<td>626</td>
<td>VO</td>
</tr>
<tr>
<td><strong>Rim-Type Exit/Panic Device (no exterior trim)</strong></td>
<td>RX AX PA 99EO</td>
<td>626</td>
<td>VO</td>
</tr>
<tr>
<td><strong>Primus I/C Cylinders (Rim or Mortise)</strong></td>
<td>20-757 or 20-763 x appropriate cam x blocking rings as required (rim or mortise type and quantity as required by locking device)</td>
<td>626</td>
<td>SC</td>
</tr>
<tr>
<td><strong>Permanent Core</strong></td>
<td>20-740</td>
<td>626</td>
<td>SC</td>
</tr>
<tr>
<td><strong>Closer</strong></td>
<td>4040 XP EDA</td>
<td>689</td>
<td>LC</td>
</tr>
<tr>
<td><strong>Kick Plate</strong></td>
<td>KO050 10&quot; tall x 2&quot; LDW (less door width) x B4E (beveled edges) x counter sunk where door allows</td>
<td>630</td>
<td>TR</td>
</tr>
<tr>
<td><strong>Stop</strong></td>
<td>1270CVPV</td>
<td>626</td>
<td>TR</td>
</tr>
<tr>
<td><strong>Mullion Seal</strong></td>
<td>5110BL</td>
<td></td>
<td>PE</td>
</tr>
<tr>
<td><strong>Power Supplies</strong></td>
<td>PS902</td>
<td></td>
<td>VO</td>
</tr>
<tr>
<td><strong>Request to Exit Device (see free egress note in above specifications)</strong></td>
<td>Specified in above locking hardware (coordinate with Divisions 25-28 and applicable drawings).</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Door Position Switch (also known as Alarm Contacts)</strong></td>
<td>Prep/Template door and frame only if DPS devices are specified by security (coordinate door and frame preparation/templates for DPS devices ordered and installed by Divisions 25-28 and applicable drawings)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Coordinate with existing electrical: At interior-side of building furnish and install single-gang, keyswitch as required so that it &quot;locks down&quot; perimeter of this door to meet CBC Sections 1010.1.9 through 1010.1.11.</strong></td>
<td>#653-14 DPDT maintained single direction x SF-626 by Locknetics manufacturing. In case of emergency as described in CBC Sections 1010.1.9 through 1010.1.11 coordinate and verify key-switch #653-14 DPDT shall drop power locking system (part of system to lock exterior-side of doors without going outside to lock the door).</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Cylinder and Keying for Electrified On-Off Keyswitch</strong></td>
<td>20-757 or 20-763 x appropriate cam x blocking rings as required (rim or mortise type and quantity as required by locking device)</td>
<td>626</td>
<td>SC</td>
</tr>
<tr>
<td><strong>Electrified On-Off Keyswitch Permanent Core</strong></td>
<td>20-740</td>
<td>626</td>
<td>SC</td>
</tr>
<tr>
<td><strong>Coordinate with electrical for locations and additional non-Section 08 71 00 scope (including but not limited</strong></td>
<td>By electrical as required per Contract Documents: - Coordinate with electrical design for locations and wire/connectivity scope (non-Section 08 71 13, see Divisions 25-28 and applicable drawings).</td>
<td></td>
<td></td>
</tr>
<tr>
<td>to wire / connectivity from ground or ceiling through frame to electrified devices</td>
<td>- Coordinate with single gang, electrical keyed cylinders to meet CBC Sections 1010.1.9 through 1010.1.11 systems (lock down operation from interior).</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**NOTE 1** – coordination for interior two-way switch on/off station to lock down doors: During building emergency, an interior, two-way switch on/off station is to be provided to drop power to locking doors for no entrance into building by un-authorized occupants (coordinate integration with power supplies and auto operator system). Coordinate with Electrical/Security Divisions 25-28 and applicable plans.

**NOTE 2:** Furnish scope in accordance with Contract Documents. Tasks/scope for painting when Section 08 71 00 hardware s adjacent to painted areas, doors or frames includes uninstalling hardware, painting/finish as required by other scope, then reinstall hardware according to manufacturer’s original warranties and recommendations.
# Hardware Group/Set #103

<table>
<thead>
<tr>
<th>Item Description</th>
<th>Model/Description</th>
<th>Quantity</th>
<th>Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hinge</td>
<td>T4A3386 (size and quantity per Section 08 71 00)</td>
<td>630</td>
<td>MC</td>
</tr>
<tr>
<td>Electrified Hinge</td>
<td>T4A3386 8-wire (size and quantity per Section 08 71 00)</td>
<td>630</td>
<td>MC</td>
</tr>
<tr>
<td>Keyed Removable Mullion</td>
<td>KR4954 (HM or AL series as required)</td>
<td>1</td>
<td>VO</td>
</tr>
<tr>
<td>Mullion Storage Kit</td>
<td>MT54</td>
<td>1</td>
<td>VO</td>
</tr>
<tr>
<td>Rim-Type Exit/Panic Device x Electrified Lever and Key Override</td>
<td>RX AX PA 99L x E996L</td>
<td>1</td>
<td>VO</td>
</tr>
<tr>
<td>Rim-Type Exit/Panic Device (no exterior trim)</td>
<td>RX AX PA 99EO</td>
<td>1</td>
<td>VO</td>
</tr>
<tr>
<td>Primus I/C Cylinders (Rim or Mortise)</td>
<td>20-757 or 20-763 x appropriate cam x blocking rings as required (rim or mortise type and quantity as required by locking device)</td>
<td>2</td>
<td>SC</td>
</tr>
<tr>
<td>Permanent Core</td>
<td>20-740</td>
<td>2</td>
<td>SC</td>
</tr>
<tr>
<td>Closer</td>
<td>4040 XP x CUSH at RHR door only</td>
<td>2</td>
<td>LC</td>
</tr>
<tr>
<td>Kick Plate</td>
<td>KO050 10&quot; tall x 2&quot; LDW (less door width) x B4E (beveled edges) x counter sunk where door allows</td>
<td>2</td>
<td>TR</td>
</tr>
<tr>
<td>Stop</td>
<td>1270CVPV</td>
<td>1</td>
<td>TR</td>
</tr>
<tr>
<td>Mullion Seal</td>
<td>5110BL</td>
<td>1</td>
<td>PE</td>
</tr>
<tr>
<td>Power Supplies</td>
<td>PS902</td>
<td>2</td>
<td>VO</td>
</tr>
<tr>
<td>Request to Exit Device (see free egress note in above specifications)</td>
<td>Specified in above locking hardware (coordinate with Divisions 25-28 and applicable drawings)</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Door Position Switch (also known as Alarm Contacts)</td>
<td>Prep/Template door and frame only if DPS devices are specified by security (coordinate door and frame preparation/templates for DPS devices ordered and installed by Divisions 25-28 and applicable drawings)</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Coordinate with existing electrical: At interior-side of building furnish and install single-gang, keyswitch as required so that it &quot;locks down&quot; perimeter of this door to meet CBC Sections 1010.1.9 through 1010.1.11.</td>
<td>#653-14 DPDT maintained single direction x SF-626 by Locknetics manufacturing. In case of emergency as described in CBC Sections 1010.1.9 through 1010.1.11 coordinate and verify key-switch #653-14 DPDT shall drop power locking system (part of system to lock exterior-side of doors without going outside to lock the door).</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Cylinder and Keying for Electrified On-Off Keyswitch</td>
<td>20-757 or 20-763 x appropriate cam x blocking rings as required (rim or mortise type and quantity as required by locking device)</td>
<td>1</td>
<td>SC</td>
</tr>
<tr>
<td>Electrified On-Off Keyswitch Permanent Core</td>
<td>20-740</td>
<td>1</td>
<td>SC</td>
</tr>
<tr>
<td>Coordinate with electrical for locations and additional non-Section 08 71 00 scope</td>
<td>By electrical as required per Contract Documents:  - Coordinate with electrical design for locations and wire/connectivity scope (non-Section 08 71 13, see Divisions 25-28 and applicable drawings).</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>
(including but not limited to wire / connectivity from ground or ceiling through frame to electrified devices)

- Coordinate with single gang, electrical keyed cylinders to meet CBC Section 1010.1.9 through 1010.1.11 systems (lock down operation from interior).

<table>
<thead>
<tr>
<th>1</th>
<th>Ea.</th>
<th>Threshold</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Threshold #2749A x 2749A special 16” wide (welded Pemko based per special detail) x wrap frame stops x beveled miter ends per specifications x mastic per specifications x by Pemko approved equal</td>
</tr>
</tbody>
</table>

NOTE 1 – coordination for interior two-way switch on/off station to lock down doors: During building emergency, an interior, two-way switch on/off station is to be provided to drop power to locking doors for no entrance into building by un-authorized occupants (coordinate integration with power supplies and auto operator system). Coordinate with Electrical/Security Divisions 25-28 and applicable plans.

NOTE 2: Furnish scope in accordance with Contract Documents. Tasks/scope for painting when Section 08 71 00 hardware s adjacent to painted areas, doors or frames includes uninstalling hardware, painting/finish as required by other scope, then reinstall hardware according to manufacturer’s original warranties and recommendations.
<table>
<thead>
<tr>
<th>Hardware Group/Set #104</th>
<th>Description</th>
<th>Model/Details</th>
<th>Quantity</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Ea. Hinge</td>
<td>T4A3386 (size and quantity per Section 08 71 00)</td>
<td>630 MC</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>1 Ea. Electrified Hinge</td>
<td>T4A3386 8-wire NRP (size and quantity per Section 08 71 00)</td>
<td>630 MC</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>1 Ea. Electrified Lockset</td>
<td>L9092T EU x 06A RX</td>
<td>630 SC</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>1 Ea. Power Supplies</td>
<td>Per 087100, Part 3 and note below for full specification requirements</td>
<td>630 SC</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>1 Ea. Primus I/C Cylinders (Rim or Mortise)</td>
<td>20-757 or 20-763 x appropriate cam x blocking rings as required (rim or mortise type and quantity as required by locking device)</td>
<td>626 SC</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>1 Ea. Permanent Core</td>
<td>20-740</td>
<td>626 SC</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>1 Ea. Closer</td>
<td>4040 XP EDA</td>
<td>689 LC</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>1 Ea. Kick Plate</td>
<td>KO050 10&quot; tall x 2&quot; LDW (less door width) x B4E (beveled edges) x counter sunk where door allows</td>
<td>630 TR</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>1 Ea. Stop</td>
<td>1270CVPV</td>
<td>626 TR</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>
| 1 Ea. Seals | Provide seals at head and jambs:  
- If frame is hollow metal, furnish S88D seals (head and jambs) by Pemko or approved seal manufacturer.  
- If frame is aluminum, then seals are to be furnished by aluminum frame manufacturer (for sound dampening if non-rated opening, smoke or fire seals if rated conditions) | 630 TR | 1 |  |
| 1 Ea. Request to Exit Device (see free egress note in above specifications) | Specified in above locking hardware (coordinate with Divisions 25-28 and applicable drawings) | 630 TR | 1 |  |
| 1 Ea. Door Position Switch (also known as Alarm Contacts) | Prep/Template door and frame only if DPS devices are specified by security (coordinate door and frame preparation/templates for DPS devices ordered and installed by Divisions 25-28 and applicable drawings) | 630 TR | 1 |  |
| 1 Ea. Coordinate with electrical for locations and additional non-Section 08 71 00 scope (including but not limited to wire / connectivity from ground or ceiling through frame to electrified devices) | By electrical as required per Contract Documents:  
- Coordinate with electrical design for locations and wire/connectivity scope (non-Section 08 71 13, see Divisions 25-28 and applicable drawings).  
- Coordinate with electrical to meet CBC Sections 1010.1.9 through 1010.1.11 systems (lock down operation from interior). | 630 TR | 1 |  |
| 1 Ea. Non-Section 08 71 00 access control panel interface modules and system to run electrified trim | By Electrical/Security (coordinate with Divisions 25-28 and applicable plans – scope includes but not limited to wire and connectivity from ceiling to electrified trim as required by non-Section 08 71 00 access control system) | 630 TR | 1 |  |

**NOTE 1** – coordination for interior two-way switch on/off station to lock down doors: During building emergency, an interior, two-way switch on/off station is to be provided to drop power to locking doors for no entrance into building by un-authorized occupants (coordinate integration with power supplies and auto operator system). Coordinate with Electrical/Security Divisions 25-28 and applicable plans.  

**NOTE 2:** Furnish scope in accordance with Contract Documents. Tasks/scope for painting when Section 08 71 00 hardware s adjacent to painted areas, doors or frames includes uninstalling hardware, painting/finish as required by other scope, then reinstall hardware according to manufacturer's original warranties and recommendations.
## Hardware Group/Set #105

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Model</th>
<th>Quantity</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Ea.</td>
<td>Hinge</td>
<td>T4A3386 (size and quantity per Section 08 71 00)</td>
<td>630</td>
<td>MC</td>
</tr>
<tr>
<td>1 Ea.</td>
<td>Electrified Hinge</td>
<td>T4A3386 8-wire NRP (size and quantity per Section 08 71 00)</td>
<td>630</td>
<td>MC</td>
</tr>
<tr>
<td>1 Ea.</td>
<td>Electrified Lockset</td>
<td>L9092T EU x 06A RX</td>
<td>630</td>
<td>SC</td>
</tr>
<tr>
<td>1 Ea.</td>
<td>Power Supplies</td>
<td>Per 087100, Part 3 and note below for full specification requirements</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 Ea.</td>
<td>Primus I/C Cylinders (Rim or Mortise)</td>
<td>20-757 or 20-763 x appropriate cam x blocking rings as required (rim or mortise type and quantity as required by locking device)</td>
<td>626</td>
<td>SC</td>
</tr>
<tr>
<td>1 Ea.</td>
<td>Permanent Core</td>
<td>20-740</td>
<td>626</td>
<td>SC</td>
</tr>
<tr>
<td>1 Ea.</td>
<td>Closer</td>
<td>4040XP x EDA (installed push-side of door if door swings out) or 4040XP REG (installed pull-side of door if door swings in)</td>
<td>689</td>
<td>LC</td>
</tr>
<tr>
<td>1 Ea.</td>
<td>Kick Plate</td>
<td>KO050 10&quot; tall x 2&quot; LDW (less door width) x B4E (beveled edges) x counter sunk where door allows</td>
<td>630</td>
<td>TR</td>
</tr>
<tr>
<td>1 Ea.</td>
<td>Stop</td>
<td>1214</td>
<td>626</td>
<td>TR</td>
</tr>
</tbody>
</table>
| 1 Ea. | Seals | Provide seals at head and jambs:  
- If frame is hollow metal, furnish S88D seals (head and jambs) by Pemko or approved seal manufacturer.  
- If frame is aluminum, then seals are to be furnished by aluminum frame manufacturer (for sound dampening if non-rated opening, smoke or fire seals if rated conditions) | | |
| 1 Ea. | Threshold | Threshold #2749A x 2749A special 16" wide (welded Pemko based per special detail) x wrap frame stops x beveled miter ends per specifications x mastic per specifications x by Pemko approved equal | | |
| 1 Ea. | Request to Exit Device (see free egress note in above specifications) | Specified in above locking hardware (coordinate with Divisions 25-28 and applicable drawings). | | |
| 1 Ea. | Door Position Switch (also known as Alarm Contacts) | Prep/Template door and frame only if DPS devices are specified by security (coordinate door and frame preparation/templates for DPS devices ordered and installed by Divisions 25-28 and applicable drawings) | | |
| 1 Ea. | Coordinate with electrical for locations and additional non-Section 08 71 00 scope (including but not limited to wire / connectivity from ground or ceiling through frame to electrified devices) | By electrical as required per Contract Documents:  
- Coordinate with electrical design for locations and wire/connectivity scope (non-Section 08 71 13, see Divisions 25-28 and applicable drawings).  
- Coordinate with electrical to meet CBC Sections 1010.1.9 through 1010.1.11 systems (lock down operation from interior). | | |
| 1 Ea. | Non-Section 08 71 00 access control panel interface modules and system to run electrified trim | By Electrical/Security (coordinate with Divisions 25-28 and applicable plans – scope includes but not limited to wire and connectivity from ceiling to electrified trim as required by non-Section 08 71 00 access control system) | | |

**NOTE 1** – coordination for interior two-way switch on/off station to lock down doors: During building
emergency, an interior, two-way switch on/off station is to be provided to drop power to locking doors for no entrance into building by un-authorized occupants (coordinate integration with power supplies and auto operator system). Coordinate with Electrical/Security Divisions 25-28 and applicable plans.

NOTE 2: Furnish scope in accordance with Contract Documents. Tasks/scope for painting when Section 08 71 00 hardware s adjacent to painted areas, doors or frames includes uninstalling hardware, painting/finish as required by other scope, then reinstall hardware according to manufacturer's original warranties and recommendations.
## Hardware Group/Set #106

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Quantity</th>
<th>Part Number</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Ea.</td>
<td>Hinge</td>
<td>T4A3386 (size and quantity per Section 08 71 00)</td>
<td>630</td>
<td>MC</td>
</tr>
<tr>
<td>1 Ea.</td>
<td>Electrified Hinge</td>
<td>T4A3386 8-wire NRP (size and quantity per Section 08 71 00)</td>
<td>630</td>
<td>MC</td>
</tr>
<tr>
<td>1 Ea.</td>
<td>Electrified Lockset</td>
<td>L9092T EU x 06A RX</td>
<td>630</td>
<td>SC</td>
</tr>
<tr>
<td>1 Ea.</td>
<td>Power Supplies</td>
<td>Per Section 08 71 00, Part 3 and note below for full specification requirements</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 Ea.</td>
<td>Primus I/C Cylinders (Rim or Mortise)</td>
<td>20-757 or 20-763 x appropriate cam x blocking rings as required (rim or mortise type and quantity as required by locking device)</td>
<td>626</td>
<td>SC</td>
</tr>
<tr>
<td>1 Ea.</td>
<td>Permanent Core</td>
<td>20-740</td>
<td>626</td>
<td>SC</td>
</tr>
<tr>
<td>1 Ea.</td>
<td>Closer</td>
<td>4040 XP REG x special back to back template with 1ADJ or equal concealed overhead stop</td>
<td>689</td>
<td>LC</td>
</tr>
<tr>
<td>1 Ea.</td>
<td>Overhead Stop</td>
<td>1ADJ series (sized -336 or as required by door width)</td>
<td>630</td>
<td>RX</td>
</tr>
<tr>
<td>1 Ea.</td>
<td>Kick Plate</td>
<td>KO050 10&quot; tall x 2&quot; LDW (less door width) x B4E (beveled edges) x counter sunk where door allows</td>
<td>630</td>
<td>TR</td>
</tr>
<tr>
<td>1 Ea.</td>
<td>Seals</td>
<td>Provide seals at head and jambs: - If frame is hollow metal, furnish S88D seals (head and jambs) by Pemko or approved seal manufacturer. - If frame is aluminum, then seals are to be furnished by aluminum frame manufacturer (for sound dampening if non-rated opening, smoke or fire seals if rated conditions)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 Ea.</td>
<td>Request to Exit Device (see free egress note in above specifications)</td>
<td>Specified in above locking hardware (coordinate with Divisions 25-28 and applicable drawings).</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 Ea.</td>
<td>Door Position Switch (also known as Alarm Contacts)</td>
<td>Prep/Template door and frame only if DPS devices are specified by security (coordinate door and frame preparation/templates for DPS devices ordered and installed by Divisions 25-28 and applicable drawings)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 Ea.</td>
<td>Coordinate with electrical for locations and additional non-Section 08 71 00 scope (including but not limited to wire / connectivity from ground or ceiling through frame to electrified devices)</td>
<td>By electrical as required per Contract Documents: - Coordinate with electrical design for locations and wire/connectivity scope (non-Section 08 71 13, see Divisions 25-28 and applicable drawings). - Coordinate with electrical to meet CBC Sections 1010.1.9 through 1010.1.11 systems (lock down operation from interior).</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 Ea.</td>
<td>Non-Section 08 71 00 access control panel interface modules and system to run electrified trim</td>
<td>By Electrical/Security (coordinate with Divisions 25-28 and applicable plans – scope includes but not limited to wire and connectivity from ceiling to electrified trim as required by non-Section 08 71 00 access control system)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**NOTE 1** – coordination for interior two-way switch on/off station to lock down doors: During building emergency, an interior, two-way switch on/off station is to be provided to drop power to locking doors for no entrance into building by un-authorized occupants (coordinate integration with power supplies and auto operator system). Coordinate with Electrical/Security Divisions 25-28 and applicable plans.

**NOTE 2:** Furnish scope in accordance with Contract Documents. Tasks/scope for painting when
Section 08 71 00 hardware s adjacent to painted areas, doors or frames includes uninstalling hardware, painting/finish as required by other scope, then reinstall hardware according to manufacturer’s original warranties and recommendations.

### Hardware Group/Set #107

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Ea.</td>
<td>Hinge</td>
<td>TA2314 (size and quantity per Section 08 71 00)</td>
</tr>
<tr>
<td>1 Ea.</td>
<td>Electrified Hinge</td>
<td>TA2314 8-wire NRP (size and quantity per Section 08 71 00)</td>
</tr>
<tr>
<td>1 Ea.</td>
<td>Electrified Lockset</td>
<td>L9092T EU x 06A RX</td>
</tr>
<tr>
<td>1 Ea.</td>
<td>Power Supplies</td>
<td>Per 087100, Part 3 and note below for full specification requirements</td>
</tr>
<tr>
<td>1 Ea.</td>
<td>Primus I/C Cylinders (Rim or Mortise)</td>
<td>20-757 or 20-763 x appropriate cam x blocking rings as required (rim or mortise type and quantity as required by locking device)</td>
</tr>
<tr>
<td>1 Ea.</td>
<td>Permanent Core</td>
<td>20-740</td>
</tr>
<tr>
<td>1 Ea.</td>
<td>Closer x Stop Arm</td>
<td>4040 XP CUSH</td>
</tr>
<tr>
<td>1 Ea.</td>
<td>Kick Plate</td>
<td>KO050 10&quot; tall x 2&quot; LDW (less door width) x B4E (beveled edges) x counter sunk where door allows</td>
</tr>
</tbody>
</table>
| 1 Ea. | Seals | Provide seals at head and jambs:
- If frame is hollow metal, furnish S88D seals (head and jambs) by Pemko or approved seal manufacturer.
- If frame is aluminum, then seals are to be furnished by aluminum frame manufacturer (for sound dampening if non-rated opening, smoke or fire seals if rated conditions) |
| 1 Ea. | Surface Applied Seal | 29310CS seals (head and jambs) by Pemko or approved seal manufacturer x custom shims for aluminum frame and Closer Arm coordination |
| 1 Ea. | Auto Door Bottom (sound dampening) | 411APKL or 420APKL (as required per door material or wood or hollow metal) by Pemko or approved manufacturer |
| 1 Ea. | Thermal Break Threshold | 273x4CFG or per detail (sized to fit the condition) by Pemko or approved manufacturer |
| 1 Ea. | Request to Exit Device (see free egress note in above specifications) | Specified in above locking hardware (coordinate with Divisions 25-28 and applicable drawings) |
| 1 Ea. | Door Position Switch (also known as Alarm Contacts) | Prep/Template door and frame only if DPS devices are specified by security (coordinate door and frame preparation/templates for DPS devices ordered and installed by Divisions 25-28 and applicable drawings) |
| 1 Ea. | Coordinate with electrical for locations and additional non-Section 08 71 00 scope (including but not limited to wire / connectivity from ground or ceiling through frame to electrified devices) | By electrical as required per Contract Documents:
- Coordinate with electrical design for locations and wire/connectivity scope (non-Section 08 71 13, see Divisions 25-28 and applicable drawings).
- Coordinate with electrical to meet CBC Sections 1010.1.9 through 1010.1.11 systems (lock down operation from interior). |
1 Ea. Non-Section 08 71 00 access control panel interface modules and system to run electrified trim

By Electrical/Security (coordinate with Divisions 25-28 and applicable plans – scope includes but not limited to wire and connectivity from ceiling to electrified trim as required by non-Section 08 71 00 access control system)

NOTE 1 – coordination for interior two-way switch on/off station to lock down doors: During building emergency, an interior, two-way switch on/off station is to be provided to drop power to locking doors for no entrance into building by un-authorized occupants (coordinate integration with power supplies and auto operator system). Coordinate with Electrical/Security Divisions 25-28 and applicable plans.

NOTE 2: Furnish scope in accordance with Contract Documents. Tasks/scope for painting when Section 08 71 00 hardware is adjacent to painted areas, doors or frames includes uninstalling hardware, painting/finish as required by other scope, then reinstall hardware according to manufacturer’s original warranties and recommendations.

<table>
<thead>
<tr>
<th>Hardware Group/Set #108</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Ea.</td>
</tr>
<tr>
<td>1 Ea.</td>
</tr>
</tbody>
</table>

NOTE 1: For doors/openings assigned this hardware group/set, the cylinder is for unit-type pricing. At each opening assigned this hardware group/set, provide final keying as required per locking and/or key control devices. Examples include, but are not limited to, rolling gates or coiling door locking devices and/or control switches that activate or control the on/off switches).

NOTE 2: Furnish all devices and components for hardware groups/set above in accordance with Contract Documents including, but not limited to, notes below, additional hardware devices requirements in the above specification language, architectural plans, and full specification documents.
## Hardware Group/Set #109

<table>
<thead>
<tr>
<th></th>
<th>Ea.</th>
<th>Hinge</th>
<th>Description</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Ea.</td>
<td>Classroom-Type Lockset</td>
<td>L9071T 06A (size and quantity per Section 08 71 00)</td>
<td>630 MC</td>
</tr>
<tr>
<td>2</td>
<td>Ea.</td>
<td>I/C Cylinders (Rim or Mortise)</td>
<td>20-757 or 20-763 x appropriate cam x blocking rings as required (rim or mortise type and quantity as required by locking device)</td>
<td>626 SC</td>
</tr>
<tr>
<td>2</td>
<td>Ea.</td>
<td>Permanent Core</td>
<td>20-740</td>
<td>626 SC</td>
</tr>
<tr>
<td>1</td>
<td>Ea.</td>
<td>Surface Closer</td>
<td>4040XP EDA (installed push-side of door if door swings out) or 4040XP REG (installed pull-side of door if door swings in)</td>
<td>689 LC</td>
</tr>
<tr>
<td>1</td>
<td>Ea.</td>
<td>Kick Plate</td>
<td>KO050 10&quot; tall x 2&quot; LDW (less door width) x B4E (beveled edges) x counter sunk where door allows</td>
<td>630 TR</td>
</tr>
<tr>
<td>1</td>
<td>Ea.</td>
<td>Mop Plate (inswing doors only)</td>
<td>KM050 6&quot; tall x 1&quot; LDW (less door width) x B4E (beveled edges) x counter sunk where door allows</td>
<td>630 TR</td>
</tr>
<tr>
<td>1</td>
<td>Ea.</td>
<td>Stop</td>
<td>1270CV</td>
<td>626 TR</td>
</tr>
<tr>
<td>1</td>
<td>Ea.</td>
<td>Seal (sound dampening)</td>
<td>Provide seals at head and jambs:</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- If frame is hollow metal, furnish S773D seals (head and jambs) by Pemko or approved seal manufacturer.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- If frame is aluminum, then seals are to be furnished by aluminum frame manufacturer (for sound dampening if non-rated opening, smoke or fire seals if rated conditions)</td>
<td></td>
</tr>
</tbody>
</table>

**NOTE:** Furnish all devices and components for hardware groups/set above in accordance with Contract Documents including, but not limited to, additional hardware devices requirements in the above specification language, architectural plans, and full specification documents.
<table>
<thead>
<tr>
<th></th>
<th>Ea.</th>
<th>Hardware Item</th>
<th>Details</th>
<th>Code</th>
<th>Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td>Hinge T4A3386 (size and quantity per Section 08 71 00)</td>
<td>630 MC</td>
<td></td>
<td>MC</td>
</tr>
<tr>
<td>1</td>
<td>Ea.</td>
<td>Classroom-Type Lockset L9071T 06A</td>
<td>626 MA</td>
<td></td>
<td>MA</td>
</tr>
<tr>
<td>2</td>
<td>Ea.</td>
<td>I/C Cylinders (Rim or Mortise)</td>
<td>20-757 or 20-763 x appropriate cam x blocking rings as required (rim or mortise type and quantity as required by locking device)</td>
<td>626</td>
<td>SC</td>
</tr>
<tr>
<td>2</td>
<td>Ea.</td>
<td>Permanent Core 20-740</td>
<td>626 SC</td>
<td></td>
<td>SC</td>
</tr>
<tr>
<td>1</td>
<td></td>
<td>Closer 4040 XP REG x special back to back template with 1ADJ or equal concealed overhead stop</td>
<td>689 LC</td>
<td></td>
<td>LC</td>
</tr>
<tr>
<td>1</td>
<td>Ea.</td>
<td>Overhead Stop 1ADJ series (sized -336 or as required by door width)</td>
<td>630</td>
<td>RX</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Ea.</td>
<td>Kick Plate KO050 10&quot; tall x 2&quot; LDW (less door width) x B4E (beveled edges) x counter sunk where door allows</td>
<td>630</td>
<td>TR</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Ea.</td>
<td>Mop Plate (inswing doors only)</td>
<td>KM050 6&quot; tall x 1&quot; LDW (less door width) x B4E (beveled edges) x counter sunk where door allows</td>
<td>630</td>
<td>TR</td>
</tr>
<tr>
<td>1</td>
<td>Ea.</td>
<td>Stop 1270CV</td>
<td>626 TR</td>
<td></td>
<td>TR</td>
</tr>
<tr>
<td>1</td>
<td>Ea.</td>
<td>Seal (sound dampening)</td>
<td>Provide seals at head and jambs:</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>- If frame is hollow metal, furnish S773D seals (head and jambs) by Pemko or approved seal manufacturer.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>- If frame is aluminum, then seals are to be furnished by aluminum frame manufacturer (for sound dampening if non-rated opening, smoke or fire seals if rated conditions)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

NOTE: Furnish all devices and components for hardware groups/set above in accordance with Contract Documents including, but not limited to, additional hardware devices requirements in the above specification language, architectural plans, and full specification documents.
<table>
<thead>
<tr>
<th>_</th>
<th>Ea.</th>
<th>Hinge</th>
<th>Description</th>
<th>Quantity</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Ea.</td>
<td>Privacy x Occupancy Indicator (exterior side lever can be locked at night and left unlocked during business hours when room is not in use):</td>
<td>L9456T x 06A #L283-722, interior ADA large thumbturn and exterior side emergency cylinder/key override with Occupancy Indicator)</td>
<td>62</td>
<td>MA SC</td>
</tr>
<tr>
<td>2</td>
<td>Ea.</td>
<td>I/C Cylinders (Rim or Mortise)</td>
<td>20-757 or 20-763 x appropriate cam x blocking rings as required (rim or mortise type and quantity as required by locking device)</td>
<td>62</td>
<td>SC</td>
</tr>
<tr>
<td>2</td>
<td>Ea.</td>
<td>Permanent Core</td>
<td>20-740</td>
<td>62</td>
<td>SC</td>
</tr>
<tr>
<td>1</td>
<td>Ea.</td>
<td>Surface Closer</td>
<td>4040XP EDA (installed push-side of door if door swings out) or 4040XP REG (installed pull-side of door if door swings in)</td>
<td>69</td>
<td>LC</td>
</tr>
<tr>
<td>1</td>
<td>Ea.</td>
<td>Kick Plate</td>
<td>KO050 10&quot; tall x 2&quot; LDW (less door width) x B4E (beveled edges) x counter sunk where door allows</td>
<td>63</td>
<td>TR</td>
</tr>
<tr>
<td>1</td>
<td>Ea.</td>
<td>Mop Plate (inswing doors only)</td>
<td>KM050 6&quot; tall x 1&quot; LDW (less door width) x B4E (beveled edges) x counter sunk where door allows</td>
<td>63</td>
<td>TR</td>
</tr>
<tr>
<td>1</td>
<td>Ea.</td>
<td>Stop</td>
<td>1270CV</td>
<td>62</td>
<td>TR</td>
</tr>
</tbody>
</table>
| 1 | Ea. | Seal (sound dampening) | Provide seals at head and jambs:  
- If frame is hollow metal, furnish S773D seals (head and jambs) by Pemko or approved seal manufacturer.  
- If frame is aluminum, then seals are to be furnished by aluminum frame manufacturer (for sound dampening if non-rated opening, smoke or fire seals if rated conditions) | 62 | SC |

**NOTE:** Furnish all devices and components for hardware groups/set above in accordance with Contract Documents including, but not limited to, additional hardware devices requirements in the above specification language, architectural plans, and full specification documents.
### Hardware Group/Set #112

<table>
<thead>
<tr>
<th></th>
<th>Ea.</th>
<th>Hinge</th>
<th>Description</th>
<th>Quantity</th>
<th>Group/Section</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Ea.</td>
<td>Hinge</td>
<td>T4A3386 (size and quantity per Section 08 71 00)</td>
<td>630 MC</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Ea.</td>
<td>Classroom-Type Lockset</td>
<td>L9071T 06A</td>
<td>626 MA</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Ea.</td>
<td>I/C Cylinders (Rim or Mortise)</td>
<td>20-757 or 20-763 x appropriate cam x blocking rings as required (rim or mortise type and quantity as required by locking device)</td>
<td>626 SC</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Ea.</td>
<td>Permanent Core</td>
<td>20-740</td>
<td>626 SC</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Ea.</td>
<td>Surface Closer</td>
<td>4040XP EDA (installed push-side of door if door swings out) or 4040XP REG (installed pull-side of door if door swings in)</td>
<td>689 LC</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Ea.</td>
<td>Kick Plate</td>
<td>KO050 10&quot; tall x 2&quot; LDW (less door width) x B4E (beveled edges) x counter sunk where door allows</td>
<td>630 TR</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Ea.</td>
<td>Stop</td>
<td>1270CV</td>
<td>626 TR</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Ea.</td>
<td>Seal (sound dampening)</td>
<td>Provide seals at head and jambs: - If frame is hollow metal, furnish S773D seals (head and jambs) by Pemko or approved seal manufacturer. - If frame is aluminum, then seals are to be furnished by aluminum frame manufacturer (for sound dampening if non-rated opening, smoke or fire seals if rated conditions)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Ea.</td>
<td>Electrified Hinge</td>
<td>T4A3386 8-wire NRP (size and quantity per Section 08 71 00)</td>
<td>630 MC</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Ea.</td>
<td>Electrified Lockset</td>
<td>L9092T EU x 06A RX</td>
<td>630 SC</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Ea.</td>
<td>Power Supplies</td>
<td>Per Section 08 71 00, Part 3 and note below for full specification requirements</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Ea.</td>
<td>Door Position Switch (also known as Alarm Contacts)</td>
<td>Prep/Template door and frame only if DPS devices are specified by security (coordinate door and frame preparation/templates for DPS devices ordered and installed by Divisions 25-28 and applicable drawings)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Ea.</td>
<td>Coordinate with electrical for locations and additional non-Section 08 71 00 scope (including but not limited to wire / connectivity from ground or ceiling through frame to electrified devices)</td>
<td>By electrical as required per Contract Documents: - Coordinate with electrical design for locations and wire/connectivity scope (non-Section 08 71 13, see Divisions 25-28 and applicable drawings). - Coordinate with single gang, electrical keyed cylinders to meet CBC Sections 1010.1.9 through 1010.1.11 systems (lock down operation from interior).</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Ea.</td>
<td>Non-Section 08 71 00 access control panel interface modules and system to run electrified trim</td>
<td>By Electrical/Security (coordinate with Divisions 25-28 and applicable plans – scope includes but not limited to wire and connectivity from ceiling to electrified trim as required by non-Section 08 71 00 access control system)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Ea.</td>
<td>Coordinate with existing</td>
<td>#653-14 DPDT maintained single direction x SF-626 by</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
electrical: At interior-side of building furnish and install single-gang, keyswitch as required so that it "locks down" perimeter of this door to meet CBC Sections 1010.1.9 through 1010.1.11.

Locknetics manufacturing. In case of emergency as described in CBC Sections 1010.1.9 through 1010.1.11 coordinate and verify key-switch #653-14 DPDT shall drop power locking system (part of system to lock exterior-side of doors without going outside to lock the door).

<table>
<thead>
<tr>
<th>Hardware Group/Set #113</th>
<th>1 Ea.</th>
<th>Hinge</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>T4A3386 (size and quantity per Section 08 71 00)</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>Push Plate</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1001-3-20” x custom 20” high plate (total size 4” wide x 20” tall) x CuVerro Bactericidal Copper in 630 base and stainless colored finish (samples required per above)</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>Pull Plate</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1017-3 x CuVerro Bactericidal Copper in 630 base and stainless colored finish (samples required per above)</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>Surface Closer</td>
</tr>
<tr>
<td></td>
<td></td>
<td>4040XP EDA (installed push-side of door if door swings out) or 4040XP REG (installed pull-side of door if door swings in)</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>Kick Plate</td>
</tr>
<tr>
<td></td>
<td></td>
<td>KO050 10” tall x 2” LDW (less door width) x B4E (beveled edges) x counter sunk where door allows</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>Mop Plate</td>
</tr>
<tr>
<td></td>
<td></td>
<td>KM050 10” tall x 1” LDW (less door width) x B4E (beveled edges) x counter sunk where door allows</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>Floor Stop</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1209</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>Seal (sound dampening)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Provide seals at head and jambs:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- If frame is hollow metal, furnish S773D seals (head and jambs) by Pemko or approved seal manufacturer.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- If frame is aluminum, then seals are to be furnished by aluminum frame manufacturer (for sound dampening if non-rated opening, smoke or fire seals if rated conditions)</td>
</tr>
</tbody>
</table>

NOTE: Furnish all devices and components for hardware groups/set above in accordance with Contract Documents including, but not limited to, additional hardware devices requirements in the above specification language, architectural plans, and full specification documents.
## Hardware Group/Set #114

<table>
<thead>
<tr>
<th></th>
<th>Ea.</th>
<th>Description</th>
<th>Details</th>
<th>Quantity</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Ea.</td>
<td>Hinge</td>
<td>T4A3386 (size and quantity per Section 08 71 00)</td>
<td>630 MC</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td></td>
<td>Classroom-Type Lockset</td>
<td>L9071T 06A</td>
<td>626 MA</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Ea.</td>
<td>I/C Cylinders (Rim or Mortise)</td>
<td>20-757 or 20-763 x appropriate cam x blocking rings as required (rim or mortise type and quantity as required by locking device)</td>
<td>626 SC</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Ea.</td>
<td>Permanent Core</td>
<td>20-740</td>
<td>626 SC</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Ea.</td>
<td>Kick Plate</td>
<td>KO050 10&quot; tall x 2&quot; LDW (less door width) x B4E (beveled edges) x counter sunk where door allows</td>
<td>630 TR</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Ea.</td>
<td>Stop</td>
<td>1270CV</td>
<td>626 TR</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Ea.</td>
<td>Seal (sound dampening)</td>
<td>Provide seals at head and jambs: - If frame is hollow metal, furnish S773D seals (head and jambs) by Pemko or approved seal manufacturer. - If frame is aluminum, then seals are to be furnished by aluminum frame manufacturer (for sound dampening if non-rated opening, smoke or fire seals if rated conditions)</td>
<td>630 TR</td>
<td></td>
</tr>
</tbody>
</table>

**NOTE:** Furnish all devices and components for hardware groups/set above in accordance with Contract Documents including, but not limited to, additional hardware devices requirements in the above specification language, architectural plans, and full specification documents.

**NOTE 2:** At doors numbered L106B and L115B a card reader has been added. Delete above locking device and one hinge. In addition to devices in hardware set above, furnish and install the following:

<table>
<thead>
<tr>
<th></th>
<th>Ea.</th>
<th>Description</th>
<th>Details</th>
<th>Quantity</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Ea.</td>
<td>Electrified Hinge</td>
<td>T4A3386 8-wire NRP (size and quantity per Section 08 71 00)</td>
<td>630 MC</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td></td>
<td>Electrified Lockset</td>
<td>L9092T EU x 06A RX</td>
<td>630 SC</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Ea.</td>
<td>Power Supplies</td>
<td>Per Section 08 71 00, Part 3 and note below for full specification requirements</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Ea.</td>
<td>Door Position Switch (also known as Alarm Contacts)</td>
<td>Prep/Template door and frame only if DPS devices are specified by security (coordinate door and frame preparation/templates for DPS devices ordered and installed by Divisions 25-28 and applicable drawings)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Ea.</td>
<td>Coordinate with electrical for locations and additional non-Section 08 71 00 scope (including but not limited to wire / connectivity from ground or ceiling through frame to electrified devices)</td>
<td>By electrical as required per Contract Documents: - Coordinate with electrical design for locations and wire/connectivity scope (non-Section 08 71 13, see Divisions 25-28 and applicable drawings). - Coordinate with single gang, electrical keyed cylinders to meet CBC Sections 1010.1.9 through 1010.1.11 systems (lock down operation from interior).</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Ea.</td>
<td>Non-Section 08 71 00 access control panel interface modules and system to run electrified trim</td>
<td>By Electrical/Security (coordinate with Divisions 25-28 and applicable plans – scope includes but not limited to wire and connectivity from ceiling to electrified trim as required by non-Section 08 71 00 access control system)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Ea.</td>
<td>Coordinate with existing electrical: At interior-side of building furnish and install single-gang, keyswitch as required so</td>
<td>#653-14 DPDT maintained single direction x SF-626 by Locknetics manufacturing. In case of emergency as described in CBC Sections 1010.1.9 through 1010.1.11 coordinate and verify key-switch #653-14 DPDT shall drop power locking system (part of system to lock exterior-side of doors without going outside to appendices)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
that it "locks down" perimeter of this door to meet CBC Sections 1010.1.9 through 1010.1.11.

<table>
<thead>
<tr>
<th>Item Description</th>
<th>Quantity</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cylinder and Keying for Electrified On-Off Keyswitch</td>
<td>1 Ea.</td>
<td>20-757 or 20-763 x appropriate cam x blocking rings as required (rim or mortise type and quantity as required by locking device)</td>
</tr>
<tr>
<td>Electrified On-Off Keyswitch Permanent Core</td>
<td>1 Ea.</td>
<td>20-740</td>
</tr>
</tbody>
</table>

**Hardware Group/Set #115**

<table>
<thead>
<tr>
<th>Item Description</th>
<th>Quantity</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hinge</td>
<td>1 Ea.</td>
<td>T4A3386 (size and quantity per Section 08 71 00)</td>
</tr>
<tr>
<td>Classroom-Type Lockset</td>
<td>1 Ea.</td>
<td>L9071T 06A</td>
</tr>
<tr>
<td>I/C Cylinders (Rim or Mortise)</td>
<td>2 Ea.</td>
<td>20-757 or 20-763 x appropriate cam x blocking rings as required (rim or mortise type and quantity as required by locking device)</td>
</tr>
<tr>
<td>Permanent Core</td>
<td>2 Ea.</td>
<td>20-740</td>
</tr>
<tr>
<td>Overhead Stop</td>
<td>1 Ea.</td>
<td>9ADJ series (sized -336 or as required by door width)</td>
</tr>
<tr>
<td>Kick Plate</td>
<td>1 Ea.</td>
<td>KO050 10&quot; tall x 2&quot; LDW (less door width) x B4E (beveled edges) x counter sunk where door allows</td>
</tr>
<tr>
<td>Mop Plate</td>
<td>1 Ea.</td>
<td>KM050 10&quot; tall x 1&quot; LDW (less door width) x B4E (beveled edges) x counter sunk where door allows</td>
</tr>
<tr>
<td>Seal (sound dampening)</td>
<td>1 Ea.</td>
<td>Provide seals at head and jambs: - If frame is hollow metal, furnish S773D seals (head and jambs) by Pemko or approved seal manufacturer. - If frame is aluminum, then seals are to be furnished by aluminum frame manufacturer (for sound dampening if non-rated opening, smoke or fire seals if rated conditions)</td>
</tr>
</tbody>
</table>

NOTE: Furnish all devices and components for hardware groups/set above in accordance with Contract Documents including, but not limited to, additional hardware devices requirements in the above specification language, architectural plans, and full specification documents.
<table>
<thead>
<tr>
<th></th>
<th>Ea.</th>
<th>Hinge</th>
<th>Description</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Ea.</td>
<td>Hinge T4A3386 (size and quantity per Section 08 71 00)</td>
<td>630 MC</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Ea.</td>
<td>Storeroom-Type Lockset L9080T 06A</td>
<td>630 SC</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Ea.</td>
<td>I/C Cylinders (Rim or Mortise)</td>
<td>20-757 or 20-763 x appropriate cam x blocking rings as required (rim or mortise type and quantity as required by locking device)</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Ea.</td>
<td>Permanent Core 20-740</td>
<td>626 SC</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Ea.</td>
<td>Surface Closer 4040XP CUSH arm desired unless doors swings into room (install CUSH stop arm push-side of door if door swings out) or 4040XP REG (installed pull-side of door if door swings in)</td>
<td>689 LC</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Ea.</td>
<td>Kick Plate KO050 10&quot; tall x 2&quot; LDW (less door width) x B4E (beveled edges) x counter sunk where door allows</td>
<td>630 TR</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Ea.</td>
<td>Stop (at inswinging doors only)</td>
<td>1214 TR</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Ea.</td>
<td>Door Silencers at non-Smoke or non-Fire Rated Applications</td>
<td>SR64 or SR65 (as required)</td>
<td>GR</td>
</tr>
</tbody>
</table>

NOTE: Furnish all devices and components for hardware groups/set above in accordance with Contract Documents including, but not limited to, additional hardware devices requirements in the above specification language, architectural plans, and full specification documents. Throughout project, if openings/doors are smoke or fire rated, provide S88D seal (head and jambs) and 4040XP closer to meet CBC and NFPA 80 requirements.
### Hardware Group/Set #117

<table>
<thead>
<tr>
<th>EA</th>
<th>Item Description</th>
<th>Specification/Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Hinge</td>
<td>TA2314 (size and quantity per Section 08 71 00) 630 MC</td>
</tr>
<tr>
<td>2</td>
<td>Classroom-Type Lockset</td>
<td>L9071T 06A 630 SC</td>
</tr>
<tr>
<td>2</td>
<td>I/C Cylinders (Rim or Mortise)</td>
<td>20-757 or 20-763 x appropriate cam x blocking rings as required (rim or mortise type and quantity as required by locking device) 626 SC</td>
</tr>
<tr>
<td>2</td>
<td>Permanent Core</td>
<td>20-740 626 SC</td>
</tr>
<tr>
<td>1</td>
<td>Kick Plate</td>
<td>KO050 10&quot; tall x 2&quot; LDW (less door width) x B4E (beveled edges) x counter sunk where door allows 630 TR</td>
</tr>
<tr>
<td>1</td>
<td>Door Stop</td>
<td>1270CV 626 TR</td>
</tr>
<tr>
<td>1</td>
<td>Seal (sound dampening)</td>
<td>Provide seals at head and jambs:</td>
</tr>
<tr>
<td></td>
<td>- If frame is hollow metal, furnish S88D seals (head and jambs) by Pemko or approved seal manufacturer.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- If frame is aluminum, then seals are to be furnished by aluminum frame manufacturer (for sound dampening if non-rated opening, smoke or fire seals if rated conditions)</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Auto Door Bottom (sound dampening)</td>
<td>411APKL or 420APKL (as required per door material or wood or hollow metal) by Pemko or approved manufacturer.</td>
</tr>
<tr>
<td>1</td>
<td>Threshold (sound dampening)</td>
<td>270A (4&quot; with non-slip groove) or per detail sized to fit the condition x FSL25 by Pemko or approved manufacturer.</td>
</tr>
</tbody>
</table>

**NOTE:** Furnish all devices and components for hardware groups/set above in accordance with Contract Documents including, but not limited to, additional hardware devices requirements in the above specification language, architectural plans, and full specification documents.
### Hardware Group/Set #118

<table>
<thead>
<tr>
<th></th>
<th>Ea.</th>
<th>Hinge Description</th>
<th>Specification</th>
<th>Material</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Ea.</td>
<td>Office-Type Lockset L9050 x #06A lever x L583-363 ADA Large Thumbturn</td>
<td>TA2314</td>
<td>630</td>
</tr>
<tr>
<td>1</td>
<td>Ea.</td>
<td>I/C Cylinders (Rim or Mortise) 20-757 or 20-763 x appropriate cam x blocking</td>
<td></td>
<td>626</td>
</tr>
<tr>
<td></td>
<td></td>
<td>rings as required (rim or mortise type and quantity as required by locking device)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Ea.</td>
<td>Permanent Core 20-740</td>
<td></td>
<td>626</td>
</tr>
<tr>
<td>1</td>
<td>Ea.</td>
<td>Kick Plate KO050 10&quot; tall x 2&quot; LDW (less door width) x B4E (beveled edges) x</td>
<td></td>
<td>630</td>
</tr>
<tr>
<td></td>
<td></td>
<td>counter sunk where door allows</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Ea.</td>
<td>Door Stop 1270CV</td>
<td></td>
<td>626</td>
</tr>
<tr>
<td>1</td>
<td>Ea.</td>
<td>Seal (sound dampening) Provide seals at head and jambs:</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>- If frame is hollow metal, furnish S88D seals (head and jambs) by Pemko or</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>approved seal manufacturer.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>- If frame is aluminum, then seals are to be furnished by aluminum frame</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>manufacturer (for sound dampening if non-rated opening, smoke or fire seals if</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>rated conditions)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Ea.</td>
<td>Auto Door Bottom (sound dampening) 411APKL or 420APKL (as required per door</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>material or wood or hollow metal) by Pemko or approved manufacturer.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Ea.</td>
<td>Threshold (sound dampening) 270A (4&quot; with non-slip groove) or per detail sized to</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>fit the condition x FSL25 by Pemko or approved manufacturer.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**NOTE:** Furnish all devices and components for hardware groups/set above in accordance with Contract Documents including, but not limited to, additional hardware devices requirements in the above specification language, architectural plans, and full specification documents.
<table>
<thead>
<tr>
<th>_ Ea.</th>
<th>Hinge</th>
<th>T4A3386 (size and quantity per Section 08 71 00)</th>
<th>630</th>
<th>MC</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Ea.</td>
<td>Classroom-Type Lockset</td>
<td>L9071T 06A</td>
<td>630</td>
<td>SC</td>
</tr>
<tr>
<td>2 Ea.</td>
<td>I/C Cylinders (Rim or Mortise)</td>
<td>20-757 or 20-763 x appropriate cam x blocking rings as required (rim or mortise type and quantity as required by locking device)</td>
<td>626</td>
<td>SC</td>
</tr>
<tr>
<td>2 Ea.</td>
<td>Permanent Core</td>
<td>20-740</td>
<td>626</td>
<td>SC</td>
</tr>
<tr>
<td>1 Ea.</td>
<td>Surface Closer</td>
<td>4040XP EDA. At door #A202B, provide CUSH arm (closer with integrated stop arm)</td>
<td>689</td>
<td>LC</td>
</tr>
<tr>
<td>1 Ea.</td>
<td>Kick Plate</td>
<td>KO050 10&quot; tall x 2&quot; LDW (less door width) x B4E (beveled edges) x counter sunk where door allows</td>
<td>630</td>
<td>TR</td>
</tr>
<tr>
<td>1 Ea.</td>
<td>Door Stop</td>
<td>1209</td>
<td>630</td>
<td>TR</td>
</tr>
<tr>
<td>1 Ea.</td>
<td>Seal (sound dampening)</td>
<td>Provide seals at head and jambs:</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>- If frame is hollow metal, furnish S88D seals (head and jambs) by Pemko or approved seal manufacturer.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>- If frame is aluminum, then seals are to be furnished by aluminum frame manufacturer (for sound dampening if non-rated opening, smoke or fire seals if rated conditions)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 Ea.</td>
<td>Auto Door Bottom (sound dampening)</td>
<td>411APKL or 420APKL (as required per door material or wood or hollow metal) by Pemko or approved manufacturer.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 Ea.</td>
<td>Threshold (sound dampening)</td>
<td>270A (4&quot; with non-slip groove) or per detail sized to fit the condition x FSL25 by Pemko or approved manufacturer.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

NOTE: Furnish all devices and components for hardware groups/set above in accordance with Contract Documents including, but not limited to, additional hardware devices requirements in the above specification language, architectural plans, and full specification documents.
### Hardware Group/Set #120

<table>
<thead>
<tr>
<th></th>
<th>Ea.</th>
<th>Hardware Item</th>
<th>Description</th>
<th>Contract #</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td>Hinge</td>
<td>HS303 Half Surface Pin and Barrel Continuous Hinge. Existing frame condition.</td>
<td>630</td>
<td>MA</td>
</tr>
<tr>
<td>1</td>
<td></td>
<td>Storeroom-Type Lockset</td>
<td>L9080T 06A</td>
<td>630</td>
<td>SC</td>
</tr>
<tr>
<td>1</td>
<td></td>
<td>I/C Cylinders (Rim or Mortise)</td>
<td>20-757 or 20-763 x appropriate cam x blocking rings as required (rim or mortise type and quantity as required by locking device)</td>
<td>626</td>
<td>SC</td>
</tr>
<tr>
<td>1</td>
<td></td>
<td>Permanent Core</td>
<td>20-740</td>
<td>626</td>
<td>SC</td>
</tr>
<tr>
<td>1</td>
<td></td>
<td>Stop</td>
<td>KO050 10&quot; tall x 2&quot; LDW (less door width) x B4E (beveled edges) x counter sunk where door allows</td>
<td>630</td>
<td>TR</td>
</tr>
<tr>
<td>1</td>
<td></td>
<td>Kick Plate</td>
<td>1261 at non-rated doors. 1209 at rated doors.</td>
<td>626</td>
<td>TR</td>
</tr>
<tr>
<td>3</td>
<td></td>
<td>Door Silencers at non-Smoke or non-Fire Rated Applications</td>
<td>SR64 or SR65 (as required)</td>
<td>GR IV</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td></td>
<td>Threshold</td>
<td>Threshold #2749A x 2749A special 16&quot; wide (welded Pemko based per special detail) x wrap frame stops x beveled miter ends per specifications x mastic per specifications x by Pemko approved equal</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**NOTE:** Furnish all devices and components for hardware groups/set above in accordance with Contract Documents including, but not limited to, additional hardware devices requirements in the above specification language, architectural plans, and full specification documents. Throughout project, if openings/doors are smoke or fire rated, provide S88D seal (head and jambs) and 4040XP closer to meet CBC and NFPA 80 requirements.

### Hardware Group/Set #121

<table>
<thead>
<tr>
<th></th>
<th>Ea.</th>
<th>Hardware Item</th>
<th>Description</th>
<th>Contract #</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Hinge</td>
<td>T4A3386 (size and quantity per Section 08 71 00)</td>
<td>630</td>
<td>MC</td>
</tr>
<tr>
<td>1</td>
<td></td>
<td>Classroom-Type Lockset</td>
<td>L9071T 06A</td>
<td>630</td>
<td>SC</td>
</tr>
<tr>
<td>2</td>
<td></td>
<td>I/C Cylinders (Rim or Mortise)</td>
<td>20-757 or 20-763 x appropriate cam x blocking rings as required (rim or mortise type and quantity as required by locking device)</td>
<td>626</td>
<td>SC</td>
</tr>
<tr>
<td>2</td>
<td></td>
<td>Permanent Core</td>
<td>20-740</td>
<td>626</td>
<td>SC</td>
</tr>
<tr>
<td>1</td>
<td></td>
<td>Surface Closer</td>
<td>4040XP REG</td>
<td>689</td>
<td>LC</td>
</tr>
<tr>
<td>1</td>
<td></td>
<td>Kick Plate</td>
<td>KO050 10&quot; tall x 2&quot; LDW (less door width) x B4E (beveled edges) x counter sunk where door allows</td>
<td>630</td>
<td>TR</td>
</tr>
<tr>
<td>1</td>
<td></td>
<td>Door Stop</td>
<td>1270CV</td>
<td>626</td>
<td>TR</td>
</tr>
<tr>
<td>1</td>
<td></td>
<td>Seal (sound dampening)</td>
<td>Provide seals at head and jambs:</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- If frame is hollow metal, furnish S88D seals (head and jambs) by Pemko or approved seal manufacturer.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- If frame is aluminum, then seals are to be furnished by aluminum frame manufacturer (for sound dampening if non-rated opening, smoke or fire seals if rated conditions)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**NOTE:** Furnish all devices and components for hardware groups/set above in accordance with Contract Documents including, but not limited to, additional hardware devices requirements in the above specification language, architectural plans, and full specification documents.
# Hardware Group/Set #122

<table>
<thead>
<tr>
<th></th>
<th>Ea.</th>
<th>Hinge</th>
<th>TA2314 (size and quantity per Section 08 71 00)</th>
<th>630</th>
<th>MC</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td>Classroom-Type Lockset L9070T 06A</td>
<td></td>
<td>626</td>
<td>MA</td>
</tr>
<tr>
<td>1</td>
<td></td>
<td>I/C Cylinders (Rim or Mortise) 20-757 or 20-763</td>
<td>20-757 or 20-763 x appropriate cam x blocking rings as required (rim or mortise type and quantity as required by locking device)</td>
<td>626</td>
<td>SC</td>
</tr>
<tr>
<td>1</td>
<td></td>
<td>Permanent Core 20-740</td>
<td></td>
<td>626</td>
<td>SC</td>
</tr>
<tr>
<td>1</td>
<td></td>
<td>Overhead Stop 10 series (sized -336 or as required by door width)</td>
<td>10 series (sized -336 or as required by door width)</td>
<td>630</td>
<td>RX</td>
</tr>
<tr>
<td>1</td>
<td></td>
<td>Kick Plate KO050 10&quot; tall x 2&quot; LDW (less door width) x B4E (beveled edges) x counter sunk where door allows</td>
<td>KO050 10&quot; tall x 2&quot; LDW (less door width) x B4E (beveled edges) x counter sunk where door allows</td>
<td>630</td>
<td>TR</td>
</tr>
<tr>
<td>3</td>
<td></td>
<td>Door Silencers SR64 or SR65 (as required)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**NOTE:** Furnish all devices and components for hardware groups/set above in accordance with Contract Documents including, but not limited to, additional hardware devices requirements in the above specification language, architectural plans, and full specification documents.
<table>
<thead>
<tr>
<th></th>
<th>Ea.</th>
<th>Hinge</th>
<th>Description</th>
<th>Quantity</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>T4A3386</td>
<td>(size and quantity per Section 08 71 00)</td>
<td>630</td>
<td>MC</td>
</tr>
<tr>
<td>1</td>
<td>Ea.</td>
<td>Latching Flush Bolt Sets</td>
<td></td>
<td>626/630</td>
<td>TR</td>
</tr>
<tr>
<td>1</td>
<td>Ea.</td>
<td>Active Leaf: Left Hand-Side Classroom-Type Lockset</td>
<td>L9071T 06A</td>
<td>630</td>
<td>SC</td>
</tr>
<tr>
<td>2</td>
<td>Ea.</td>
<td>I/C Cylinders (Rim or Mortise)</td>
<td>20-757 or 20-763 x appropriate cam x blocking rings as required (rim or mortise type and quantity as required by locking device)</td>
<td>626</td>
<td>SC</td>
</tr>
<tr>
<td>2</td>
<td>Ea.</td>
<td>Permanent Core</td>
<td>20-740</td>
<td>626</td>
<td>SC</td>
</tr>
<tr>
<td>1</td>
<td>Ea.</td>
<td>Coordinator</td>
<td>#3094 series x filler plates x mounting brackets as required for coordinated hardware x painted to match frame</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Ea.</td>
<td>Surface Closer (inactive leaf only)</td>
<td>4040XP CUSH</td>
<td>689</td>
<td>LC</td>
</tr>
<tr>
<td>2</td>
<td>Ea.</td>
<td>Kick Plate</td>
<td>KO050 10&quot; tall x 2&quot; LDW (less door width) x B4E (beveled edges) x counter sunk where door allows</td>
<td>630</td>
<td>TR</td>
</tr>
<tr>
<td>2</td>
<td>Ea.</td>
<td>Mop Plate</td>
<td>KO050 10&quot; tall x 2&quot; LDW (less door width) x B4E (beveled edges) x counter sunk where door allows</td>
<td>630</td>
<td>TR</td>
</tr>
<tr>
<td>1</td>
<td>Ea.</td>
<td>Door Stop at active door</td>
<td>1270CV</td>
<td>626</td>
<td>TR</td>
</tr>
<tr>
<td>1</td>
<td>Ea.</td>
<td>Active/Inactive Edge Guard Set</td>
<td>EG-308 x EG-308T x all hardware cutouts x UL (coordinate as required for overlapping astragal)</td>
<td>630</td>
<td>MA</td>
</tr>
<tr>
<td>1</td>
<td>Ea.</td>
<td>Overlapping Astragal Seals (sound dampening)</td>
<td>S77D seals (head and jambs) by Pemko or approved seal manufacturer.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| 1 | Ea. | Seal (sound dampening) | Provide seals at head and jambs:  
- If frame is hollow metal, furnish S88D seals (head and jambs) by Pemko or approved seal manufacturer.  
- If frame is aluminum, then seals are to be furnished by aluminum frame manufacturer (for sound dampening if non-rated opening, smoke or fire seals if rated conditions) | | |

**NOTE:** Furnish all devices and components for hardware groups/set above in accordance with Contract Documents including, but not limited to, additional hardware devices requirements in the above specification language, architectural plans, and full specification documents.
<table>
<thead>
<tr>
<th></th>
<th>Ea.</th>
<th>Hinge</th>
<th>T4A3386 (size and quantity per Section 08 71 00)</th>
<th>630</th>
<th>MC</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td>Latching Flush Bolt Sets</td>
<td>Provide either #3820 at top x 3810 and 3911 dust proof strike for metal doors or if doors are wood #3825L at top x 3815L and 3911 dust proof strike</td>
<td>626/630</td>
<td>TR</td>
</tr>
<tr>
<td>1</td>
<td></td>
<td>Active Leaf: Right Hand-Side Classroom-Type Lockset</td>
<td>L9071T 06A</td>
<td>630</td>
<td>SC</td>
</tr>
<tr>
<td>2</td>
<td></td>
<td>I/C Cylinders (Rim or Mortise)</td>
<td>20-757 or 20-763 x appropriate cam x blocking rings as required (rim or mortise type and quantity as required by locking device)</td>
<td>626</td>
<td>SC</td>
</tr>
<tr>
<td>2</td>
<td></td>
<td>Permanent Core</td>
<td>20-740</td>
<td>626</td>
<td>SC</td>
</tr>
<tr>
<td>2</td>
<td></td>
<td>Kick Plate</td>
<td>KO050 10&quot; tall x 2&quot; LDW (less door width) x B4E (beveled edges) x counter sunk where door allows</td>
<td>630</td>
<td>TR</td>
</tr>
<tr>
<td>2</td>
<td></td>
<td>Door Stop</td>
<td>1270CV</td>
<td>626</td>
<td>TR</td>
</tr>
<tr>
<td>2</td>
<td></td>
<td>Door Silencers</td>
<td>SR64 or SR65 (as required)</td>
<td>GR</td>
<td>IV</td>
</tr>
</tbody>
</table>

NOTE: Furnish all devices and components for hardware groups/set above in accordance with Contract Documents including, but not limited to, additional hardware devices requirements in the above specification language, architectural plans, and full specification documents.
### Hardware Group/Set #125

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Quantity</th>
<th>Model/Style</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Ea.</td>
<td>Swing Clear Hinge</td>
<td>HG-329 x cut for 4612-SC</td>
<td>630 MA</td>
<td></td>
</tr>
<tr>
<td>1 Ea.</td>
<td>Electrified Power Transfer</td>
<td>4612-SC (swing clear application)</td>
<td>AD</td>
<td></td>
</tr>
<tr>
<td>1 Ea.</td>
<td>Electrified Lockset</td>
<td>L9092T EU x 06A RX</td>
<td>630 SC</td>
<td></td>
</tr>
<tr>
<td>2 Ea.</td>
<td>I/C Cylinders (Rim or Mortise)</td>
<td>20-757 or 20-763 x appropriate cam x blocking rings as required (rim or mortise type and quantity as required by locking device)</td>
<td>626 SC</td>
<td></td>
</tr>
<tr>
<td>2 Ea.</td>
<td>Permanent Core</td>
<td>20-740</td>
<td>626 SC</td>
<td></td>
</tr>
<tr>
<td>1 Ea.</td>
<td>Surface Closer</td>
<td>4040XP REG (installed special template back to back with overhead stop)</td>
<td>689 LC</td>
<td></td>
</tr>
<tr>
<td>1 Ea.</td>
<td>Overhead Stop</td>
<td>9ADJ series (sized -336 or as required by door width) Installed special template back to back with pull-side closer</td>
<td>630 RX</td>
<td></td>
</tr>
<tr>
<td>1 Ea.</td>
<td>Kick Plate</td>
<td>KO050 10&quot; tall x 2&quot; LDW (less door width) x B4E (beveled edges) x counter sunk where door allows</td>
<td>630 TR</td>
<td></td>
</tr>
<tr>
<td>1 Ea.</td>
<td>Mop Plate</td>
<td>KM050 10&quot; tall x 1&quot; LDW (less door width) x B4E (beveled edges) x counter sunk where door allows</td>
<td>630 TR</td>
<td></td>
</tr>
<tr>
<td>1 Ea.</td>
<td>Seal (sound dampening)</td>
<td>Provide seals at head and jambs: - If frame is hollow metal, furnish S88D seals (head and jambs) by Pemko or approved seal manufacturer. - If frame is aluminum, then seals are to be furnished by aluminum frame manufacturer (for sound dampening if non-rated opening, smoke or fire seals if rated conditions)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**NOTE:** Furnish all devices and components for hardware groups/set above in accordance with Contract Documents including, but not limited to, additional hardware devices requirements in the above specification language, architectural plans, and full specification documents. Throughout project, if openings/doors are smoke or fire rated, provide S88D seal (head and jambs) and 4040XP closer to meet CBC and NFPA 80 requirements.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Quantity</th>
<th>Model/Style</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Ea.</td>
<td>Power Supplies</td>
<td>Per Section 08 71 00, Part 3 and note below for full specification requirements</td>
<td></td>
</tr>
<tr>
<td>1 Ea.</td>
<td>Door Position Switch (also known as Alarm Contacts)</td>
<td>Prep/Template door and frame only if DPS devices are specified by security (coordinate door and frame preparation/templates for DPS devices ordered and installed by Divisions 25-28 and applicable drawings)</td>
<td></td>
</tr>
<tr>
<td>1 Ea.</td>
<td>Coordinate with electrical for locations and additional non-Section 08 71 00 scope (including but not limited to wire/ connectivity from ground or ceiling through frame to electrified devices)</td>
<td>By electrical as required per Contract Documents: - Coordinate with electrical design for locations and wire/connectivity scope (non-Section 08 71 13, see Divisions 25-28 and applicable drawings). - Coordinate with single gang, electrical keyed cylinders to meet CBC Sections 1010.1.9 through 1010.1.11 systems (lock down operation from interior)</td>
<td></td>
</tr>
<tr>
<td>1 Ea.</td>
<td>Non-Section 08 71 00 access control panel interface modules and system to run electrified trim</td>
<td>By Electrical/Security (coordinate with Divisions 25-28 and applicable plans – scope includes but not limited to wire and connectivity from ceiling to electrified trim as required by non-Section 08 71 00 access control system)</td>
<td></td>
</tr>
<tr>
<td>1 Ea.</td>
<td>Coordinate with existing electrical: At interior-side</td>
<td>#653-14 DPDT maintained single direction x SF-626 by Locknetics manufacturing. In case of emergency as described</td>
<td></td>
</tr>
</tbody>
</table>
of building furnish and install single-gang, keyswitch as required so that it "locks down" perimeter of this door to meet CBC Sections 1010.1.9 through 1010.1.11.

| 1 Ea. | Cylinder and Keying for Electrified On-Off Keyswitch | 20-757 or 20-763 x appropriate cam x blocking rings as required (rim or mortise type and quantity as required by locking device) | 626 | SC |
| 1 Ea. | Electrified On-Off Keyswitch Permanent Core | 20-740 | 626 | SC |

### Hardware Group/Set #126

<table>
<thead>
<tr>
<th></th>
<th>Hinge</th>
<th>T4A3386 (size and quantity per Section 08 71 00)</th>
<th>630</th>
<th>MC</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Ea.</td>
<td>Classroom-Type Lockset</td>
<td>L9071T 06A</td>
<td>626</td>
<td>SC</td>
</tr>
<tr>
<td>2 Ea.</td>
<td>I/C Cylinders (Rim or Mortise)</td>
<td>20-757 or 20-763 x appropriate cam x blocking rings as required (rim or mortise type and quantity as required by locking device)</td>
<td>626</td>
<td>SC</td>
</tr>
<tr>
<td>2 Ea.</td>
<td>Permanent Core</td>
<td>20-740</td>
<td>626</td>
<td>SC</td>
</tr>
<tr>
<td>1 Ea.</td>
<td>Surface Closer</td>
<td>4040XP EDA</td>
<td>689</td>
<td>LC</td>
</tr>
<tr>
<td>1 Ea.</td>
<td>Kick Plate</td>
<td>KO050 10&quot; tall x 2&quot; LDW (less door width) x B4E (beveled edges) x counter sunk where door allows</td>
<td>630</td>
<td>TR</td>
</tr>
<tr>
<td>1 Ea.</td>
<td>Stop</td>
<td>1214</td>
<td>626</td>
<td>TR</td>
</tr>
</tbody>
</table>
| 1 Ea. | Seal (sound dampening) | Provide seals at head and jambs:  
- If frame is hollow metal, furnish S773D seals (head and jambs) by Pemko or approved seal manufacturer.  
- If frame is aluminum, then seals are to be furnished by aluminum frame manufacturer (for sound dampening if non-rated opening, smoke or fire seals if rated conditions) |

**NOTE:** Furnish all devices and components for hardware groups/set above in accordance with Contract Documents including, but not limited to, additional hardware devices requirements in the above specification language, architectural plans, and full specification documents.

### Hardware Group/Set #127

<table>
<thead>
<tr>
<th></th>
<th>Closer</th>
<th>4040 XP x CUSH</th>
<th>689</th>
<th>LC</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Ea.</td>
<td>Door Bottom Sweep</td>
<td>315CN</td>
<td>PE</td>
<td></td>
</tr>
</tbody>
</table>

**NOTE - remainder of work:** Non-Section 08 71 00 tasks including, but not limited to Section 07 92 00 sealants and/or Section 09 91 00 prime/paint. Furnish scope in accordance with Contract Documents. Tasks/scope for painting when Section 08 71 00 hardware s adjacent to painted areas, doors or frames includes uninstalling hardware, painting/finish as required by other scope, then reinstall hardware according to manufacturer's original warrants and recommendations.
## Hardware Group/Set #128

<table>
<thead>
<tr>
<th>_</th>
<th>Ea.</th>
<th>Hinge</th>
<th>TA2314 (size and quantity per Section 08 71 00)</th>
<th>630</th>
<th>MC</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Ea.</td>
<td>Office-Type Lockset</td>
<td>L9050 x #06A lever x L583-363 ADA Large Thumdburn</td>
<td>630</td>
<td>SC</td>
</tr>
<tr>
<td>1</td>
<td>Ea.</td>
<td>I/C Cylinders (Rim or Mortise)</td>
<td>20-757 or 20-763 x appropriate cam x blocking rings as required (rim or mortise type and quantity as required by locking device)</td>
<td>626</td>
<td>SC</td>
</tr>
<tr>
<td>1</td>
<td>Ea.</td>
<td>Permanent Core</td>
<td>20-740</td>
<td>626</td>
<td>SC</td>
</tr>
<tr>
<td>1</td>
<td>Ea.</td>
<td>Kick Plate</td>
<td>KO050 10&quot; tall x 2&quot; LDW (less door width) x B4E (beveled edges) x counter sunk where door allows</td>
<td>630</td>
<td>TR</td>
</tr>
<tr>
<td>1</td>
<td>Ea.</td>
<td>Door Stop</td>
<td>1270CV</td>
<td>626</td>
<td>TR</td>
</tr>
<tr>
<td>1</td>
<td>Ea.</td>
<td>Seal (sound dampening)</td>
<td>Provide seals at head and jambs: - If frame is hollow metal, furnish S88D seals (head and jambs) by Pemko or approved seal manufacturer. - If frame is aluminum, then seals are to be furnished by aluminum frame manufacturer (for sound dampening if non-rated opening, smoke or fire seals if rated conditions)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Ea.</td>
<td>Auto Door Bottom (sound dampening)</td>
<td>411APKL or 420APKL (as required per door material or wood or hollow metal) by Pemko or approved manufacturer.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Ea.</td>
<td>Threshold</td>
<td>Threshold #2749A x 2749A special 16&quot; wide (welded Pemko based per special detail) x wrap frame stops x beveled miter ends per specifications x mastic per specifications x by Pemko approved equal</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**NOTE:** Furnish all devices and components for hardware groups/set above in accordance with Contract Documents including, but not limited to, additional hardware devices requirements in the above specification language, architectural plans, and full specification documents.

END OF SECTION
<table>
<thead>
<tr>
<th>Door Number</th>
<th>Existing Doors</th>
<th>Location</th>
<th>Fire Rating (Mins)</th>
<th>HDW GP</th>
<th>Type</th>
<th>Width</th>
<th>ID</th>
</tr>
</thead>
<tbody>
<tr>
<td>A101A</td>
<td></td>
<td>Corridor</td>
<td>0</td>
<td>1</td>
<td>DG3</td>
<td>3'-0&quot;</td>
<td></td>
</tr>
<tr>
<td>A101B</td>
<td>(E)</td>
<td>Corridor</td>
<td>0</td>
<td>4</td>
<td>DG2(E)</td>
<td>3'-0&quot;</td>
<td></td>
</tr>
<tr>
<td>A102A</td>
<td></td>
<td>Pool Equipment</td>
<td>20</td>
<td></td>
<td>DF2(E)</td>
<td>4'-0 1/4&quot;</td>
<td>AD5</td>
</tr>
<tr>
<td>A102B</td>
<td>(E)</td>
<td>Pool Equipment</td>
<td>0</td>
<td>12</td>
<td>DF2(E)</td>
<td>4'-0 1/4&quot;</td>
<td>AD5</td>
</tr>
<tr>
<td>A102C</td>
<td>(E)</td>
<td>Pool Equipment</td>
<td>0</td>
<td>12</td>
<td>DL3(E)</td>
<td>4'-0 1/4&quot;</td>
<td></td>
</tr>
<tr>
<td>A102D</td>
<td>(E)</td>
<td>Pool Equipment</td>
<td>0</td>
<td>12</td>
<td>DF2(E)</td>
<td>4'-0 1/4&quot;</td>
<td>AD5</td>
</tr>
<tr>
<td>A102E</td>
<td>(E)</td>
<td>Pool Equipment</td>
<td>0</td>
<td>12</td>
<td>DL3(E)</td>
<td>4'-0 1/4&quot;</td>
<td></td>
</tr>
<tr>
<td>A103A</td>
<td></td>
<td>Boiler Room</td>
<td>20</td>
<td></td>
<td>DF1</td>
<td>3'-0&quot;</td>
<td></td>
</tr>
<tr>
<td>A103B</td>
<td>(E)</td>
<td>Boiler Room</td>
<td>0</td>
<td>12</td>
<td>DF1</td>
<td>3'-0&quot;</td>
<td></td>
</tr>
<tr>
<td>A104A</td>
<td></td>
<td>Dance Studio</td>
<td>20</td>
<td>103</td>
<td>DV1</td>
<td>3'-0&quot;</td>
<td></td>
</tr>
<tr>
<td>A104B</td>
<td></td>
<td>Dance Studio</td>
<td>0</td>
<td>5</td>
<td>DV2</td>
<td>3'-0&quot;</td>
<td></td>
</tr>
<tr>
<td>A105</td>
<td></td>
<td>Storage</td>
<td>0</td>
<td>124</td>
<td>DF1</td>
<td>3'-0&quot;</td>
<td></td>
</tr>
<tr>
<td>A106</td>
<td></td>
<td>Storage</td>
<td>0</td>
<td>124</td>
<td>DF1</td>
<td>3'-0&quot;</td>
<td></td>
</tr>
<tr>
<td>A107</td>
<td></td>
<td>Women's Restroom</td>
<td>20</td>
<td>109</td>
<td>DF1</td>
<td>3'-0&quot;</td>
<td></td>
</tr>
<tr>
<td>A108</td>
<td></td>
<td>Custodial</td>
<td>20</td>
<td>116</td>
<td>DF1</td>
<td>3'-0&quot;</td>
<td></td>
</tr>
<tr>
<td>A109</td>
<td></td>
<td>Men's Restroom</td>
<td>20</td>
<td>110</td>
<td>DF1</td>
<td>3'-0&quot;</td>
<td></td>
</tr>
<tr>
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</table>
1. All existing equipment, light fixtures, conduits, wiring, etc. shown on plan are based on available existing documents when building is disconnected from its primary power source.

2. Existing equipment, light fixtures, conduits, wiring, etc. shown on plan are based on available existing documents when building is disconnected from its primary power source.

3. Provide an allowance for three (3) temporary 20 amp circuits, 2.

Existing equipment, light fixtures, conduits, wiring, etc. remain are shown solid. Existing equipment, light fixtures, etc. shown on plan are based on available existing documents when building is disconnected from its primary power source.

1/2" C, 2#10 + 1#10 GND, 100 feet to support potential power needs to remain are shown solid. Existing equipment, light fixtures, etc. shown on plan are based on available existing documents when building is disconnected from its primary power source.

Conductors in their entirety back to source. Existing equipment, light fixtures, conduits, wiring, etc. shown on plan are based on available existing documents when building is disconnected from its primary power source.

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Conductors in their entirety back to source. Existing equipment, light fixtures, conduits, wiring, etc. shown on plan are based on available existing documents when building is disconnected from its primary power source.
I REFER TO ONE LINE DIAGRAM - ANNEX - MODIFIED 1/E-602, FOR FEEDER SHEET NOTES

CONDUIT AND CONDUCTOR SIZES.

INTERCEPT EXISTING ELEVATOR ANCILLIARY CIRCUITS AND EXTEND WITH (1) CIRCUIT FROM PANEL GA-EL-8 TO RELAY MODULE.

CORRIDOR.

EXISTING PANEL 'BA' IN NEW LOCATION AND RELABELED AS PANEL 'GA-EL'.

PLAN - LEVEL 2, 1/GA.E-112.

CIRCUIT VIA FIRE ALARM RELAY. REFER TO FIRE/SMOKE DAMPER WIRING NEW RECEPTACLE(S) IN EXISTING OUTLET BOX LOCATION.

INTERCEPT EXISTING ELEVATOR AND EXTERIOR LIGHT CIRCUITS IN UP TO FIRE/SMOKE DAMPER ON LEVEL 2. REFER TO BUILDING GA- POWER DIAGRAM ON FIRE ALARM DRAWINGS.

AC 38

WP

3/4"C, 6#12, + 1 #12 CU GND TO CIRCUITS GA-EL-1,3,5 AND WITH (1) 3/4"C, 6#12, + 1 #12 CU GND TO CIRCUITS GA-EL-2,4,6.

INTERCEPT EXISTING ELEVATOR ANCILLIARY CIRCUITS AND EXTEND WITH (1) CIRCUIT FROM PANEL GA-EL-8 TO RELAY MODULE.

CORRIDOR.

EXISTING PANEL 'BA' IN NEW LOCATION AND RELABELED AS PANEL 'GA-EL'.

PLAN - LEVEL 2, 1/GA.E-112.

CIRCUIT VIA FIRE ALARM RELAY. REFER TO FIRE/SMOKE DAMPER WIRING NEW RECEPTACLE(S) IN EXISTING OUTLET BOX LOCATION.

INTERCEPT EXISTING ELEVATOR AND EXTERIOR LIGHT CIRCUITS IN UP TO FIRE/SMOKE DAMPER ON LEVEL 2. REFER TO BUILDING GA- POWER DIAGRAM ON FIRE ALARM DRAWINGS.

AC 38

WP

3/4"C, 6#12, + 1 #12 CU GND TO CIRCUITS GA-EL-1,3,5 AND WITH (1) 3/4"C, 6#12, + 1 #12 CU GND TO CIRCUITS GA-EL-2,4,6.
1. VERTICAL WIRE MANAGEMENT IS NOT SHOWN FOR CLARITY. PROVIDE 10" WIRE NONE AS REQUIRED. EQUAL, ON BOTH SIDES ON FRONT AND BACK OF RACK.

2. BOLT RACK TO FLOOR IN ACCORDANCE WITH MANUFACTURER'S INSTALLATION INSTRUCTIONS.

3. MOUNT CABLE TRAY AT +8'-0". PROVIDE ALL MOUNTING BRACKETS, VERIFY EXACT LOCATION WITH DISTRICT PRIOR TO ROUGH IN.

4. PROVIDE 208V, L14-30R RECEPTACLE.

5. LINE ALL WALLS WITH 12" X 4" CABLE TRAY - CHATSWORTH #10250-712, OR EQUAL. MOUNT CABLE TRAY AT +8'-0". PROVIDE ALL MOUNTING BRACKETS, VERIFY EXACT LOCATION WITH DISTRICT PRIOR TO ROUGH IN.

6. VERIFY EXACT LOCATION WITH DISTRICT PRIOR TO ROUGH IN.

7. PROVIDE ALL MOUNTING BRACKETS, VERIFY EXACT LOCATION WITH DISTRICT PRIOR TO ROUGH IN.

8. VERIFY EXACT LOCATION WITH DISTRICT PRIOR TO ROUGH IN.

9. PROVIDE ALL MOUNTING BRACKETS, VERIFY EXACT LOCATION WITH DISTRICT PRIOR TO ROUGH IN.

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11. PROVIDE ALL MOUNTING BRACKETS, VERIFY EXACT LOCATION WITH DISTRICT PRIOR TO ROUGH IN.

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14. VERIFY EXACT LOCATION WITH DISTRICT PRIOR TO ROUGH IN.

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16. VERIFY EXACT LOCATION WITH DISTRICT PRIOR TO ROUGH IN.

17. PROVIDE ALL MOUNTING BRACKETS, VERIFY EXACT LOCATION WITH DISTRICT PRIOR TO ROUGH IN.

18. VERIFY EXACT LOCATION WITH DISTRICT PRIOR TO ROUGH IN.

19. PROVIDE ALL MOUNTING BRACKETS, VERIFY EXACT LOCATION WITH DISTRICT PRIOR TO ROUGH IN.

20. VERIFY EXACT LOCATION WITH DISTRICT PRIOR TO ROUGH IN.

21. PROVIDE ALL MOUNTING BRACKETS, VERIFY EXACT LOCATION WITH DISTRICT PRIOR TO ROUGH IN.

22. VERIFY EXACT LOCATION WITH DISTRICT PRIOR TO ROUGH IN.

23. PROVIDE ALL MOUNTING BRACKETS, VERIFY EXACT LOCATION WITH DISTRICT PRIOR TO ROUGH IN.

24. VERIFY EXACT LOCATION WITH DISTRICT PRIOR TO ROUGH IN.

25. PROVIDE ALL MOUNTING BRACKETS, VERIFY EXACT LOCATION WITH DISTRICT PRIOR TO ROUGH IN.

26. VERIFY EXACT LOCATION WITH DISTRICT PRIOR TO ROUGH IN.

27. PROVIDE ALL MOUNTING BRACKETS, VERIFY EXACT LOCATION WITH DISTRICT PRIOR TO ROUGH IN.

28. VERIFY EXACT LOCATION WITH DISTRICT PRIOR TO ROUGH IN.

29. PROVIDE ALL MOUNTING BRACKETS, VERIFY EXACT LOCATION WITH DISTRICT PRIOR TO ROUGH IN.

30. VERIFY EXACT LOCATION WITH DISTRICT PRIOR TO ROUGH IN.
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Supply From: Phases:
1 2 3 4 5

Wires:
Mains Rating:
MCB Rating:

Total Est. Demand:
Total Conn. Load:
MCB
200 A
200 A

Notes:
HVAC 8100 VA 100.00% 8100 VA
Spare 2000 VA 100.00% 2000 VA

2082 VA 1860 VA 1860 VA
0 A 0 A 0 A

Mains Type:
A.I.C. Rating:
Total Amps:
Volts:

3 100 A PANEL G-T SUBFEED SEH/3 BREAKER

Other 482 VA 125.00% 603 VA
Lighting - Dwelling Unit 572 VA 125.00% 715 VA
Lighting 14901 VA 125.00% 18627 VA
2082 VA 1860 VA 1860 VA
0 A 0 A 0 A
BUILDING L - ENLARGED SIGNAL PLAN - L121

BUILDING L - SIGNAL PLAN - LEVEL 1

KEY PLAN

1/ES-111 FOR SITE CONDUIT ROUTING AND ONE-

FILE NO. 7-C1

LEGAL FOR CONSTRUCTION - NOTE SHEET NOTES AND ACCESS CONTROL WIRING REQUIREMENTS.
ONE LINE DIAGRAM - GYM - DEMOLITION

KEYED NOTES

1. REMOVE EXISTING 12KV DISTRIBUTOR TRANSFORMER 12KV-208/120V, 3Ø, 4W PAD

2. REMOVE EXISTING 1" C, 3#4 + 1#8 GND

3. 400/3 600A BUS, 208Y/120V, 3∅, 4W TRAILER CONST. OFFICE

4. TWO 2" C, E/W 4#3/0 MCM + 1#2 GND 2" C, 3#1/0 + 1#6 GND

5. REMOVE EXISTING 12KV LOAD CENTER AND SWITCHGEAR.

6. PROVIDE TEMPORARY DISTRIBUTION PANEL TO SUPPORT PORTIONS OF THE COMPLETE SUBSTRUCTURES IN THEIR ENTIRETY. CAP CONDUIT 12 INCHES BELOW GRADE MAINTAIN POWER TO EXISTING SWITCHBOARD UNTIL CUT OVERS ARE REMOVE TRANSFORMER, ANY ASSOCIATED SWITCHGEAR AND CONDUCTOR.

7. TWO 5/8" DIA. BY 8 FEET GROUND RODS SPACED 6- FEET A PART; 1#2/0 BACKBOARD GND.

8. EXISTING TELEPHONE EXISTING GAS PIPE BOND STEEL BOND EXISTING STRUCTURAL

9. EXISTING COLD EXISTING UFER GROUND WATER PIPE BOND

10. EXISTING TELEPHONE EXISTING GAS PIPE BOND STEEL BOND EXISTING STRUCTURAL

11. EXISTING COLD EXISTING UFER GROUND WATER PIPE BOND

12. EXISTING TELEPHONE EXISTING GAS PIPE BOND STEEL BOND EXISTING STRUCTURAL

13. EXISTING COLD EXISTING UFER GROUND WATER PIPE BOND

14. EXISTING TELEPHONE EXISTING GAS PIPE BOND STEEL BOND EXISTING STRUCTURAL

15. EXISTING COLD EXISTING UFER GROUND WATER PIPE BOND

16. EXISTING TELEPHONE EXISTING GAS PIPE BOND STEEL BOND EXISTING STRUCTURAL

17. EXISTING COLD EXISTING UFER GROUND WATER PIPE BOND
KEYED NOTES:

1. Transformer and conduit stubs installed under Campus Safety Center project. Removal of the load interrupter, 208 volt gym transformer 'T3' and gym switchboard occur under this scope.

2. Provide temporary feeder to the (E) Motor Control Center (MCC) located in the gym annex building. The MCC supports pool equipment that is required to stay on-line during this project. Maintain transformer 'T1' until the MCC is cutover to the new distribution system. Remove when cutovers are complete. See FOR TEMP FEEDER.

MEDIUM VOLTAGE LEGEND

KEY:
- HEP
- System & Fuse
- Fixed Riser
- On System & Extension Riser

SHEET NOTES

1. Add No. 5 03/11/19 ADDENDUM 5

2. 12KV ONE LINE DIAGRAM - DEMOLITION

DISTRIBUTION ONE LINE DIAGRAM 'SWGR'

MEASURED & CHECK DRAWN

AD5
EXP. 6/30/20
T E A R O F F
P D E R I T G E R.
O F R O P D E R.
S I N C A L E.
R I N A R M.
L O F R O P D E R.
S I N C A L E.
R I N A R M.