# Part 1 GENERAL

* 1. **SUMMARY**
     1. Section includes:
        1. Work under this section comprises the furnishing and installation of hardware specified herein and noted on drawings for a complete and operational system, including any electrified hardware components, systems and controls.
        2. Related Documents, drawings and general provisions of contract, including General and Supplementary Conditions, and Division 1.
        3. Items include but are not limited to the following:

1. Hinges
2. Exit Devices
3. Locksets
4. Push/Pull Plates
5. Flush Bolts
6. Closers
7. Kick, Mop and Protection Plates
8. St ops and Overhead Controls
9. Thresholds, Gasketing and Door Bottoms
10. Miscellaneous Accessories and Trim
    * 1. Related Work in other sections or divisions**:**
         1. Section 06 20 00 - Finish Carpentry.
         2. Section 08 11 00 - Hollow Metal Work.
         3. Section 08 21 00 - Wood Doors.
         4. Section 08 40 00 - Entrances and Storefronts.
         5. Sections within 08 80 00 - Glazing.
         6. Sections within 09 90 00 – Painting.

# SUBSTITUTIONS

* + 1. References to specific products are used to establish minimum standards of utility and quality. Unless otherwise approved, furnish only the specified products.
    2. Requests for substitutions to be in accordance with Division 1, General Requirements.

Proposed substitutions must be submitted in writing and hand delivered to the Architect. Approvals must be by addendum ten [10] days prior to bid opening.

* + 1. All requests to be accompanied by two [2] copies of the manufacturer's brochures and a physical sample of each item in the appropriate design and finish.
    2. Items listed with no substitute have been requested by the Building Owner to match existing building standards.
    3. Hardware that is furnished and/or installed that does not meet code requirements, shall be removed and replaced with correct material at no additional expense to the District.
    4. Hardware that is substituted without the Architect and Owner’s approval, will be removed and replaced with listed hardware at no expense to the District.

# Pursuant to Public Contract Code section 3400(b), Medeco Keying System in this Specification section 08 71 00 is designated by specific brand name or trade name for the purposes of matching other products in existing District projects to establish District-wide uniform, complete, and compatible systems in order to facilitate the most technologically competitive and feasible education for school children in the District. As such, no substitutions or alternates will be accepted by the District except under specific circumstances (for example, the specified product is no longer commercially available) at the District’s sole discretion. A copy of the District findings and Resolution in accordance with Public Contract Code section 3400(b) is available upon written request at the District.

* 1. **REFERENCES**
     1. References specified in this section are subject to compliance as directed and shall meet requirements of Federal, State and local codes having jurisdiction over this project including:
        1. CCR - California Code of Regulations Title 24.
        2. ANSI-A 117.1- Accessible and Usable Buildings and Facilities.
        3. ADA - American Disabilities Act - Title III - Public Accommodations.
        4. UFAS - Uniform Federal Accessibility Standards.
        5. NFPA 80 - Standard for Fire Doors and Windows.
        6. NFPA 101 - Life Safety.
        7. ITS - Intertek Testing Service [Warnock Hersey].
        8. UL - Underwriters Laboratories.
        9. ANSI/BHMA A156 Product Listing.
        10. CBC - California Building Code, Local Codes and the Authority having Jurisdiction.
        11. UL 10C for Positive Pressure Fire Tests of Door Assemblies and UBC 7-2.

# QUALITY ASSURANCE

* + 1. PRODUCT UNIFORMITY: Except where specified, all hinges, keyed cylinders, electro- mechanical components, locksets, latchsets, exit devices, closers, overhead stop/holders and component parts shall be furnished by one manufacturer. Keying must accept Medeco formatted keyways to masterkey within the District System.
    2. RATED OPENINGS: Hardware used in labeled fire or smoke rated openings to be listed for those types of openings and bear the identifying label or mark indicating U.L. [Underwriter's Laboratories] approved for fire. Exit devices in non-labeled openings to be listed for panic.
    3. SUPPLIER: Shall be responsible for detailing hardware that meets project standards and where appropriate, retrofit applications which require inspection of openings prior to detailing and ordering respective hardware items.
    4. PRE-INSTALLATION CONFERENCE: Prior to installation of hardware, arrange a conference between supplier, installers, and related trades to review materials, procedures, hardware mounting locations and related work.
    5. INSTALLATION EXERCISE: Contractor/Installer is required to install one complete exterior opening Hardware Set and the respective hollow metal door and frame to establish both knowledge and skill as required for this project. Door/frame and hardware installation practice will be coordinated with the Project Architect and Building Owner’s Representative, and shall be accomplished to the PA’s satisfaction, and prior to the installation of any doors/frames and door hardware. Typical hardware set to be comprised of hinges, panic device, trim, door closer, overhead stop if detailed, flat goods, threshold, sweep, drip cap and perimeter seal or as directed by the Architect. Damage resulting in replacement material or repair, including labor, shall be absorbed by the Contractor/Installer.
    6. POST-INSTALLATION POLICING: Will be required by the Hardware Supplier, Contractor and Architect to determine compliance with the hardware specification and building standards.
    7. SUPPLIER QUALIFICATIONS:
       1. Hardware supplier must be a recognized, Southern California based FACTORY DIRECT contract distributor with a minimum five (5) years experience specializing in institutional grade builders hardware of the type specified herein. Distributors with less than two (2) years of history of furnishing builders hardware in the project's vicinity will not be acceptable.
       2. Supplier must have in his/her employment on a full time basis, a Certified Hardware Consultant [AHC] or person of equal experience who is acceptable to the Architect and GC or Prime Contractor (if multiple prime project). This individual shall be available for consultation and service to the architect, contractor, and District during construction at no additional cost to District and on an ongoing consulting service to the building owner following the completion of the project at no additional cost to District during warranty period.
       3. Supplier who does not maintain personnel in a permanent facility within a reasonable driving radius of the project area for consultation and service with the Architect, Contractor and the District will not be acceptable.

# GENERAL REQUIREMENTS

* + 1. COORDINATION: Coordinate as necessary with other trades to assure proper and adequate provision in the work of those trades for interface with the work of this Section.
    2. SEQUENCING AND SCHEDULING: Any part of the finish hardware required by the frame or door manufacturers or other suppliers, that is needed in order to produce doors or frames is to be sent to those suppliers in a timely manner.
    3. DEFECTIVE HARDWARE: All hardware shall be new and free from defects affecting both serviceability and appearance. Working parts shall be properly fitted, smooth working and without excessive play.
    4. FUNCTION/MODIFICATION:
       1. Should any hardware fail to meet the intended operational requirements or require any modification to suit the intended location, this matter, or any other necessary advance information, shall be brought to the attention of the architect for correction or advice in ample time to avoid delay in the manufacture and delivery of the hardware.
       2. Modifications to specified hardware, required by reason of construction characteristics, shall be furnished in the specified operational, functional features, quality and finish. Modifications shall be subject to acceptance of the Architect at no additional cost to the District.
       3. Items of hardware not specified herein but necessary for completion of the work shall be furnished at no additional cost to the District. Such items shall be of the type specified and comparable to adjacent hardware.
    5. DOORS AND FRAMES: Hollow metal and wood doors shall be manufactured to templates.

If required, physical hardware items shall be furnished to related manufacturers in sufficient time to avoid delay in work.

* + 1. ELECTRICAL COORDINATION: Before electrically controlled or operated hardware is ordered, voltages and wiring details shall be coordinated with the contractor and related trades.
    2. EXISTING OPENINGS [RETROFIT]
       1. Contractor is responsible for a field survey of doors, frames and hardware to determine compatibility of specified hardware, including, but not limited to: locksets, panic devices, strikes, flushbolts, overhead stops, coordinators, closers, threshold/seal, and hinge sizes and weights including wide throw hinge sizes as required. Survey to include inspection of sills and furnishing ADA compliant ramp threshold systems as required at each work site and respective openings.
       2. Unless directed otherwise, Installer to modify openings to meet ADA threshold/ramp requirements. Contractor to survey and where necessary, furnish and install ADA approved ramp threshold systems where applicable and approved by the Architect.
       3. Existing doors and frames to be modified for hardware as permitted by UL, WHI and local code authority. Where required, Installer shall cut and weld necessary reinforcements to existing jambs and doors, for listed hardware as applicable and required. Existing strike jambs with 2-3/4” strike template to be modified for 4- 7/8” ASA strike where listed in the hardware schedule. Installer to cut an approximate eight (8) inch section from the strike jamb and replace with a reinforced strike component. Installer to patch, sand and repaint/refinish reused door(s) and frame(s) surfaces affected by the removal of hardware, and any modification for replacement hardware.
       4. Whether listed or not, Supplier shall furnish frame/door hinge, strike, lock face, panic, closer and overhead auxiliary stop fillers where required for a clean finished appearance. Related costs to field modify existing frames and/doors shall be part of the base bid and shall include a $2,000.00 allowance each school site for hollow metal door and frame fillers. An additional allowance of $20.00 each existing opening requiring modification will be part of the Contractor’s base bid. This allowance will be allocated to the hardware supplier for time invested in the required field survey and engineering necessary for detailing a complete and accurate hardware schedule.
       5. Intertek Testing Service inspection and certification is required for the labeling of non-rated doors and frames, and the modification of any labeled door and frame. Contractor is responsible for contacting and coordinating this required labeling service.
       6. The Installer is responsible for the careful removal, treatment and delivery of all existing replaced and any unused new hardware to the District’s Lock Department.

# SUBMITTALS

* + 1. HARDWARE SCHEDULE: Submit typewritten copies of schedule in accordance with Division 1, General Requirements. Schedule to be in VERTICAL format, listing each door opening including; location, handing of opening, all hardware scheduled for each opening or otherwise required to allow for proper function of door opening as intended, finish of hardware, and respective manufacturers. Doors with closers or door controls shall require the degree of door opening.
       1. Supply six [6] copies of the schedules within fifteen [15] working days from date of purchase order.
          1. The hardware schedule shall conform with DHI's: "RECOMMENDED PROCEDURE FOR PROCESSING HARDWARE SCHEDULES AND TEMPLATES."
          2. Submit manufacturers' catalog cut sheets of all hardware items scheduled and any required special mounting instructions with the hardware schedule.
          3. Include recommended mounting location data for each type of scheduled door hardware.
       2. No hardware item shall be delivered until the hardware schedule has been approved by the Project Architect.
       3. Approval of the hardware schedule by the Architect does not relieve the hardware supplier from the responsibility of furnishing the job complete.
    2. SAMPLES:
       1. If directed by the Architect, submit physical samples of each item of hardware proposed in work.
       2. Samples will be returned on the request of and at the expense of the Contractor.
    3. MFR'S CATALOG ILLUSTRATIONS AND HARDWARE DATA:
       1. Hardware Supplier shall submit, to the Architect, two [2] catalog cuts of every item of hardware furnished for this project. Data shall be contained in a binder appropriately divided by the respective manufacturers.
       2. Cuts shall include manufacturer's illustrations and shall identify finishes, sizes and product numbers. Abbreviations to be fully explained.
    4. OPERATION/MAINTENANCE DATA: [EACH PROJECT/SITE]
       1. Deliver to the Building Owner, through the Architect, one set of maintenance operation manuals and installation guides for locksets, exit devices, door closers and electro-mechanical devices.
       2. Contractor/Installer to furnish to the hardware supplier one installation/template guide from each hardware/carton as required in item D.1.
       3. Include one [1] complete catalog for each manufacturer listed in the approved hardware schedule.
       4. Include one [1] copy of approved door and door hardware shop drawings/schedules.
    5. TEMPLATES: Templates for door hardware items to be sent to related door and frame suppliers within three [3] working days of receipt of approved hardware schedule. Templates shall not be issued until the door hardware schedule has been reviewed and approved by the Project Architect.
    6. CERTIFICATION OF COMPLIANCE: Submit any information necessary to indicate compliance to any or all of these specifications as required.
    7. KEYING SCHEDULE: Furnished by the District.
    8. CLOSE-OUT REQUIREMENTS: [EACH PROJECT/SITE]
       1. Two copies of Manufacturer’s catalog data for each item of hardware furnished.
       2. Two printed copies of an approved Finish Hardware Schedule and two copies on CD as required by the District in Excel or other software as specified by District.
       3. Provide one set installation and adjusting tools, and one set of maintenance manuals and instruction sheets for each item of hardware furnished.
       4. Deliver extra stock hardware items, as listed at the end of this specification section, to the District Lock Department.

# DELIVERY, STORAGE AND HANDLING

* + 1. PACKAGING: Each unit of hardware shall be individually packaged in the manufacturer's original containers as required by the respective hardware manufacturers. Packaging shall include factory original installation instructions, fastenings and all items necessary for complete installation.
    2. WRAPPING: Wrap and cushion each item to prevent scratches and dents during delivery and storage.
    3. ENVIRONMENTAL PACKAGING: Hardware shipped to the jobsite is to be packaged in biodegradable packs, such as paper or cardboard boxes and wrapping. If non- biodegradable packing is utilized, such as plastic, plastic bags or Styrofoam, then the Contractor will be responsible for the disposal of the non-biodegradable packing to a licensed or authorized collector for recycling of the material.
    4. MARKINGS: Each package shall be clearly marked on the outside, identifying contents with specific opening number corresponding to those listed in the hardware schedule. Include door and item number for each product.
    5. DELIVERY: Except as dictated otherwise, deliver all hardware to the job site. The Contractor and Hardware Supplier's Representative shall check each item of hardware against the approved finish hardware schedule.
    6. STORAGE: All hardware shall be stored in a locked storage space at contractor’s cost until ready for installation. Hardware shall be protected against damage after application and during construction period.

# WARRANTY

* + 1. All door hardware shall be supplied with a one [1] year warranty against defects in materials and workmanship, commencing with substantial completion of job.

# Part 2 PRODUCT

* 1. **MANUFACTURERS**
     1. ACCEPTABLE MANUFACTURERS:
        1. All materials or products specified herein shall be furnished AS SPECIFIED. Refer to Para. 1.02 SUBSTITUTIONS.
        2. Following are approved manufacturers for this work which comprise the bid:

|  |  |  |
| --- | --- | --- |
| **PRODUCT** | **SPECIFIED MFRS** | **APPROVED MFRS** |
| Hinge | McKinney | Stanley, Law |
| Keying System | Medeco | Medeco/Schlage |
| Lockset | Schlage | Schlage/Medeco |
| Exit Device | Von Duprin | As specified |
| Closer | Sargent | As Specified |
| Push/Pull/KP | Trimco | BBW, Quality, Sargent, Von Duprin |

|  |  |  |
| --- | --- | --- |
| Flush bolt | Trimco | BBW, Quality |
| Door Control | Trimco | BBW, Quality |
| O.H. Stop | Sargent or VCN | As Specified |
| Door Stop | Trimco | BBW, Quality |
| Thresh/Seal | Pemko | Nat’l Gd, Reese |
| Padlocks | Master | Master |

# FASTENINGS

* + 1. Furnish hardware with all necessary screws, bolts or other fastenings of suitable type and size to anchor the hardware in position for long life and heavy use. Fasteners shall include expansion shields, sex bolts, toggle bolts, or other approved anchors according to material to which it is applied and as recommended by the respective manufacturers.
    2. Furnish Phillips flat-head screws except as otherwise indicated.
    3. Thru-bolts to be supplied only if required by the door manufacturer and/District.
    4. Design of all fastenings shall harmonize with hardware as to material and finish.

# HINGES

* + 1. All butt hinges to be of one manufacturer as listed for continuity and consideration of warranty.
    2. Unless otherwise specified, furnish three-knuckle as specified; button tip, full mortise template type hinges with non-rising loose pins (no continuous hinges).
    3. Out-swinging exterior doors to be furnished with hinges of solid bronze with non- removable pins.
    4. Interior doors to be furnished with wrought steel, polished, and plated to match specified finish.
    5. Furnish three [3] hinges up to 90 inches high and one [1] additional hinge for every 30 inches or fraction thereof.
    6. Furnish heavy weight hinges on doors up to 36 inches in width, and extra heavy weight on doors exceeding 36", or as indicated in the hardware schedule.
    7. Furnish 4.5 x 4.5 inch for all 1- 3/4 inch thick doors up to 36 inch wide, and 5 x 4.5 over 36 inch wide. Doors over 1-3/4 inch thru 2-1/4 inch thick, use 5 x 5 inch hinges. Where required furnish wide throw. Contractor to field measure each opening to determine exact hinge size and weight, including all “wide throw” requirements as dictated by existing conditions.
    8. Where required, furnish hinges of sufficient width to clear trim and/or permit the door to swing 180 degrees as required by the specific opening.
    9. Furnish ball bearing hinges at all doors with door closers and/or overhead stops.
    10. All hinges to be available in 652 finish as specified.
  1. MORTISE LOCKS
     1. All mortise locks, cylindrical locks and trim to be of one manufacturer as listed for continuity of design and consideration of warranty.
     2. Locksets shall be Sargent 8200 Series x LNL trim, or equal as specified.
     3. All lockset functions shall be manufactured in a single sized case formed from 12 gauge steel minimum. The case shall be closed on all sides and back. The lockset shall have a field-adjustable, beveled armored front, with a .125 inch thickness minimum. The lockset shall be 2 3/4 inch backset standard, with a one piece 3/4 inch throw anti-friction stainless steel latchbolt. The deadbolt shall be a full one inch throw made of stainless steel and have 2 hardened steel roller inserts.
     4. Full lever retraction at only 30 degrees for ADA accommodation.
     5. Handing shall be field reversible without opening the lock case.
     6. Mortise locksets for labeled fire doors shall have a fusible link mechanism to prevent latchbolt retraction in case of fire.
     7. Furnish Keedex K24Ax626 cylinder rings at exterior locks & ILCO 861Ax626 at interior.
     8. Provide curve lip strikes with wrought boxes for all locks. Strikes shall be of sufficient length to protect trim or the inactive leaf of a pair of doors.

# CYLINDRICAL LOCKS

* + 1. All cylinders are to be high security, pick-resistant design with angled key cuts, rotating tumblers, keyway side bitting and slider mechanisms. All cylinders shall be compatible with the specified Medeco Keying System. Cylinders shall be listed with the following: UL437, ANSI/BHMA certification A156.30 2003 and A156.5 2001.
    2. All cylinders shall incorporate three locking elements, consisting of a slider mechanism, a sidebar mechanism with tumbler rotations, and pin tumbler elevation. The locking system is to be furnished in a restricted key section within the ability to key into the District’s existing master key system.
    3. All mortise, cylindrical locksets, latchsets and trim to be of one manufacturer as listed for continuity of design and consideration of warranty.
    4. Locksets shall be Sargent 30-10LxLLtrim, or equal as specified. Furnish only at existing interior doors that are to be reused and are templated for cylindrical locks.
    5. Locksets and latches shall be heavy duty cylindrical type. Latchbolts shall have minimum of ½ inch projection.
    6. Lock and latchsets shall be constructed with thru-bolted design and independent spring cartridge system for lever stability and operation.
    7. Provide curve lip strikes with wrought boxes. Strikes shall be of sufficient length to protect trim or the inactive leaf of a pair of doors.

# STOREFRONT SYSTEMS

* + 1. Hardware shall be as listed in the hardware sets where occurring.

# EXIT DEVICES

* + 1. All exit devices and lever trim to be of one manufacturer as listed and in the hardware sets for continuity of design and consideration of warranty.
    2. Exit devices shall be Sargent 80 Series x ETL trim x hex rail dogging or equal.
    3. Furnish Keedex K24A x 626 cylinder rings at exterior and ILCO 861A x 626 at interior.
    4. Exit devices to be "UL" listed for life safety. All exit devices for labeled doors shall have "UL" label for "Fire Exit Hardware". All devices mounted on labeled wood doors are to be thru-bolted or per the manufacturer's listing requirements. All devices to conform to NFPA 80 and 101 requirements.
    5. All exit devices to be of a heavy duty, chassis mounting design, with one piece removable covers, eliminating necessity of removing the device from the door for standard maintenance.
    6. All trim to be thru-bolted to the lock stile case.
    7. Lever trim to be the same as specified with locksets.
    8. Exit devices shall be push pad devices finished to match that of the locksets. Push pad to be high impact resistant black lexan with a maximum 3 inch projection.
    9. Rail assemblies of all exit devices to be of brass or bronze base material, plated to standard architectural finishes or solid stainless steel and as required in the hardware schedule.
    10. Removable Mullions to be heavy duty steel 12-L980 x Cylinder Latching.
    11. Panic hardware shall comply with UBC Standard 10-4 and shall be mounted between 32” - 44” (32” min, 44” max). per ADA, above finish floor surface. The unlatching force shall not exceed 15# applied in the direction of travel. Panic hardware shall comply with CBC Section 1010.1.9.
    12. All exit devices to be non-vertical rod (internal or external) type.

# CLOSERS

* + 1. All closers to be the product of a single manufacturer for continuity of design and consideration of warranty.
    2. Closers shall be Sargent 351 Series or LCN 4040XP x P10/PH10/CPS/CPSH or equal.
    3. Closers shall be heavy duty, surface mounted, hydraulic type, with high strength cast case. Full rack and pinion constructed of heavy steel.
    4. Size all closers in accordance with the manufacturer's recommendations at the work site.
    5. Closers to have adjustable spring power, which allows for closer sizing. Closers to have separate tamper resistant, non-critical regulating screw valves for closing speed, latching speed and backcheck control as standard features.
    6. Closer arms to be forged steel, interchangeable with all closers specified on this project for simplification of future Owner maintenance considerations.
    7. Supply appropriate arm assembly for each closer so that closer body and arm are mounted on non-public side of door opening and on the interior side of exterior openings, except where otherwise detailed.
    8. Furnish closers with special application and heavy-duty arms as specified in the hardware schedule or as otherwise called for to insure a proper-operating, long-lasting opening.
    9. All closers to be rectangular, full cover type of non-ferrous, non-corrosive material painted to match lockset finish.
    10. Refer to 3.02.A.8 Installation for opening force requirements.

# PUSH PLATES, DOOR PULLS AND KICKPLATES

* + 1. All push plates, door pulls, kickplates and other miscellaneous hardware as listed in hardware sets.
    2. Heavy duty exterior anti-vandal pulls to be 1096/97HA type as listed.
    3. Supply 18 [.050] ga. thick bronze, brass, or stainless steel, beveled 4 sides. Doors with louvers or narrow bottom rails, kickplate height to be 1 inch less than the dimension shown from the door bottom to the bottom of the louver or glass.
       1. Kickplates to be 10 inches high [16”@Jan] and Mop plates to be 6 inches high, both by 2 inches or 1 inch less than the door width as specified.
       2. Required armor plates, edge guards and protective hardware to be supplied in sizes as scheduled in the hardware sets.

# DOOR STOPS

* + 1. All doors to have a wall, overhead or floor stop.
    2. Wall stops or overhead stops are to be used where conditions permit or are required.
    3. Install floor stops within four (4) inches of adjacent wall. Exterior: furnish Trimco floor.
    4. Stop 1209-HAx630 floor stops at outswinging non-ramp openings.
    5. Furnish Trimco 1209HA at ramp threshold openings requiring elevated stops.
    6. Furnish 1214CK at inswing and interior doors as required.
    7. Walls to be internally reinforced at door stop location to support wall stops. Wall stop to be 1270CVPV.
    8. Where overhead stops and holders are specified, or otherwise required for proper door operation, they are to be heavy duty extruded brass or bronze, with no plastic parts.

# FLUSH BOLTS, COORDINATORS AND SILENCERS

* + 1. Furnish Flush bolts with Dust Proof Strikes and Coordinators as detailed and/or as required in the respective hardware sets. Finish to match adjacent hardware.
    2. Silencers to be furnished as follows:
       1. Three (3) at single openings and two (2) at pairs.

# THRESHOLDS AND GASKETING

* + 1. Supply materials and finishes as listed hardware sets. All thresholds must be in accordance with the requirements of ANSI A117.1, and shall comply with CBC Section 1133B.2.4.1.
       1. Furnish thresholds with machine screws and lead anchors. Furnish all necessary anchoring devices for gasketing and seal.
       2. Thresholds may require modification depending on final drawings, frame/floor details and opening condition. Field verify all openings for width and height requirements, and ramp systems of all affected openings.

# FINISH

* + 1. Special care shall be taken to coordinate the finish of the various manufacturers to insure a uniform finish. This finish shall match the finish of the locksets.
       1. Plated hardware shall be **BHMA626 [US26D] and as detailed in US32D**.
    2. Painted hardware items shall be lacquered to closely match plated hardware.

# KEYING [EACH PROJECT/SITE]

* + 1. Pursuant to Public Contract Code section 3400(b), only the Medeco Keying System will be accepted for the purposes of matching other products in existing District projects to establish District-wide uniform, complete, and compatible systems in order to facilitate the most technologically competitive and feasible education for school children in the District. As such, no substitutions or alternates will be accepted by the District except under specific circumstances (for example, the specified product is no longer commercially available) at the District’s sole discretion. A copy of the District findings and Resolution in accordance with Public Contract Code section 3400(b) is available upon written request at the District.
    2. Hardware supplier shall arrange a keying conference with the District Lock Department. The keying conference shall be completed in sufficient time so as not to prevent the finish hardware from being supplied to the contractor in an orderly manner.
    3. All permanent cylinders are to be Medeco Security Cylinders and are to be integrated with the District’s existing masterkey system. Medeco to supply blind codes as required by the District Lock Department.
    4. Medeco locks for Sargent system: Mortise-10W0500xCT-Z20; Rim-10W0403H; and Cylindrical-20W20049 for Sargent’s 30-10L. Verify with the Lock Department.
    5. All cylinders are to be high security, pick-resistant design with angled key cuts, rotating tumblers, keyway side bitting and slider mechanisms. Cylinders shall be listed with the following: UL437, ANSI/BHMA certification A156.30 2003 and A156.5 2001.
    6. All cylinders shall incorporate three locking elements, consisting of a slider mechanism, a sidebar mechanism with tumbler rotations, and pin tumbler elevation. The locking system is to be furnished in a restricted key section within the ability to key into the District’s existing master key system.
    7. Furnish six (6) change keys for each lockset/panic, and six (6) masterkeys each master level and site. Furnish 100 each extra Medeco factory key blanks EACH PROJECT/SITE. Review with District Lock Department Supervisor. Adhere to 2.15.E/F requirements.
    8. Permanently inscribe each key with number that identifies cylinder manufacturer, key symbol, stamping code, e.g., AA, AA1 etc; and stamped “Do Not Duplicate.”
    9. All keys to be Nickel Silver.
    10. For protection of the facility, key all cylinders at the factory where permanent records are maintained.
    11. All permanent cylinders and keys to be shipped directly from Medeco to the District’s lock department, “Return Receipt Requested.”
    12. System to include cylinder rings/collars: Keedex K24A at exterior locksets/panic, and ILCO 861A at interior locksets/panic.
    13. District requirements dictate that temporary cylinders for locksets, auxiliary locks and exit devices be supplied by the lock and panic manufacturer for use as a temporary construction keying system. **Temporary cylinders to be keyed alike to #327412** and include 12 keys to be used as construction keys. At the conclusion of the work, the District’s lock department will install the permanent Medeco Security Cylinders as specified and listed. Standard construction cylinders to remain the property of the District and shall be delivered to the lock department by the hardware installer. Supplier and Installer to coordinate the permanent cylinder installation with the District.
    14. Key Control System: provide complete key control system to include visible card index, permanent key fiber tags, temporary key tags, receipt forms, and key gather envelopes. Provide complete file and cross index file and install keys in proper hook location in cabinet. Provide wall mounted steel cabinet with capacity of 125 percent of the number of locks required for the project. Key control system shall be manufactured by TELKEE or equal approved. Deliver to the lock department. All indexing and hanging of keys will be by the lock department. **EACH PROJECT/SITE**.

# PROPRIETARY PRODUCTS

* + 1. Refer to Para 1.02. Unless otherwise approved, furnish only the specified products.

# Part 3 EXECUTION

* 1. **INSPECTION**
     1. Project requires door assemblies and components that are compliant with positive pressure and S-label requirements. Specifications must be cross referenced and coordinated to ensure that total opening engineering is compatible with UL 10C- Standard for Positive Pressure Fire Tests of Door Assemblies, and UBC 7-2, Fire Tests of Door Assemblies.
        1. Certification(s) of compliance shall be made available upon request by the Authority Having Jurisdiction.
     2. After installation has been completed, hardware supplier shall have a **qualified Hardware Consultant [AHC]** inspect project to determine the proper application of hardware according to the approved hardware and keying schedules. Inspect hardware in presence of owners representative.
        1. Check operation and adjustment of all hardware items.
        2. District recommended hardware adjustments shall be made by the Contractor/Installer as necessary for proper hardware operation.

# INSTALLATION

* + 1. Installation of finish hardware is specified under other sections. However, the following requirements apply to the work as follows:
       1. Hardware shall be installed by a QUALIFIED MECHANIC skilled in the application of institutional grade builders hardware.
       2. Install all hardware in full compliance with MFR'S instructions. When cutting and fitting is required to install hardware onto or into surfaces which are to be painted or finished, install each item completely and then remove during application. After completion, re-install each item.
       3. Care shall be exercised not to mar or damage adjacent work. Damaged work shall be repaired or replaced to the satisfaction of the Architect.
       4. Provide **ADEQUATE BACKING** in stud partitions for the attachment of all respective finish hardware.
       5. If door swing is changed from original drawings during construction, the contractor shall make necessary changes at no cost to the owner.
       6. Latches and bolts shall be installed to automatically engage strikes, whether activated by closers or manual push. In no instance should unusual manual pressure be required to engage latch or bolt in strikes. Install locks with keyways in proper position, with levers, roses, and/or escutcheons firmly affixed. Adjust strikes after silencers and/or seal are in place.
       7. Predrill pilot holes in wood for screws. Drill and tap for surface mounted hardware on metal. Set hinge leaf snug and flat in mortises, turn screws to flat seat [do not drive].
       8. **Closers** are to have opening force adjusted so as to comply with current applicable handicapped accessibility requirements as follows: interior doors 5 pounds maximum pressure to operate; exterior doors 8-1/2 pounds maximum pressure; fire doors 15 pounds maximum pressure, per CBC Section 1133B.2.5.
       9. Mount closers and overhead stops/holders in accordance with the manufacturer's template for the degree of swing indicated on the drawings [180 degree swing where conditions allow].
       10. Floor stops if absolutely required must be installed within 4 inches of the adjacent wall.
       11. Wall stops to have exterior & interior wall surfaces prepared & reinforced as req.
       12. All hardware shall meet the requirements of CBC Chapters 10 and 11B .
       13. 40 inches - Locksets, Panic Devices & centerline of strike from bottom of frame.
       14. 44 inches - Deadlocks-centerline of strike from bottom of frame.
       15. 42 inches - Pull Plates-centerline of grip from bottom of frame.
       16. 42 inches - Combination Push Bars-centerline from bottom of frame.
       17. 44 inches - Push Plates-centerline from bottom of frame.
       18. Hinges - Per manufacturer’s standard.
       19. 48 inches - Coat hook from bottom of frame.
       20. Push/Pull x Deadlock to be coordinated with plates fabricated with cylinder cutout and mated to deadlock. Supplier is required to template and furnish this application wherever this combination occurs.

# THRESHOLD AND PERIMETER SEAL:

* + - 1. Cut and fit thresholds to profile of door frames, with mitered corners and hairline joints.
      2. On exterior doors, set thresholds in a bed of sealant.
      3. Before installation, carefully read manufacturer's instructions to assure tight and contiguous seal at the perimeter and corners of doors and frames.

# Specified thresholds are subject to modification. Check with final drawings and field survey each opening affected.

* + - 1. Thresholds shall comply with CBC Section 11B.

# ADJUSTING AND CLEANING

* + 1. At final completion, all hardware shall be left clean and free from disfigurement.

Contractor shall make a final adjustment to all door closers and other items of hardware. Where hardware is found defective, repair or replace or otherwise correct as directed.

* + 1. Adjust and check each operating item of hardware and each door, to ensure proper operation or function of every unit. Adjust hardware so that moving parts operate freely, without bind, or excessive play. Hardware shall be free of paint, corrosion, or damage of any kind.

# PROTECTION

* + 1. The Contractor is responsible for the proper protection of all items of hardware until the owner accepts the project as complete.

# OWNER'S STOCK

* + 1. Refer to 1.06 for close-out requirements.
    2. Contractor/Installer to deliver all unused new and replaced finish hardware to the District’s Lock Department.

# MANUFACTURER'S ABBREVIATIONS OF LISTED HARDWARE:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| [KEE] | KEEDEX | [TRM] | TRIMCO | [TEL] | TELKEE |
| [TEL] | MCKINNEY | [PEM] | PEMKO | [VDPN] | VON DUPRIN |
| [SGT] | SARGENT | [MED] | MEDECO | [IR] | INGERSOL RAND |
| [LCN] | LCN | [SCH] | SCHLAGE |  |  |

SURVEY OF EACH SITE AND OPENING IS ABSOLUTELY REQUIRED PRIOR TO SUBMITTAL OF SHOP DRAWINGS. DISTRICT STANDARDS, PRODUCTS AND

APPLICATIONS WILL BE “STRICTLY ENFORCED”. Not applicable to new construction.

* 1. **CONTRACTOR REQUIRED TO FIELD SURVEY AND VERIFY THE FOLLOWING**:

(Not for new construction.)

* + 1. All openings to be field inspected for ramp threshold requirements.
    2. Review and verify final drawings and elevations. Consult w/p.a. for optional removal & concrete pour (score & pour) in lieu metal ramps.
    3. Exterior ramps to be as dictated by each work site and respective opg condition.
    4. Review final drawings and elevations.
    5. Exterior openings not requiring ramps to be furnished 2/196bx192b welded.
    6. Rated thresholds to be 2/196Ax192A welded at rated 45m+openings.
    7. Review final drawings and elevation details.
    8. Furnish mck-T4A3786SSF at any existing door x existing frame.
    9. Contractor to fill, patch, sand and repaint existing doors & frames affected by the removal of existing hardware & the machining for new hardware to include: closers, hinges, locksets, overhead stops, lock strikes, push-pull plates and as required by the respective openings.
    10. Existing frames with 2-3/4” strikes to be modified for asa 4-7/8” mortise strike as dictated by the hardware sets. Installer to cut an approx. 8” eight inch section from the strike jamb & weld a reinforced section.
    11. Allow maximum door swing as allowed by the respective opening.
    12. Whether listed or not, supplier shall furnish 125v/vfx581-1/2x351-a/d closer components as required by the respective openings.
    13. Cps/cpsh to be furnished at openings requiring overhead control, whether listed or not.
    14. Exterior out-swinging doors: furnish Trimco 1209hax630 stop at ramp openings requiring elevated stops and 1209-HAx630 at non-ramps. Furnish 1214ck at in-swinging exterior and interior requiring floor stops.
    15. Furnish extra hardware, close-out material, key cabinet, extra key blanks and as listed for “each project/site.”
    16. Exterior out-swinging doors to be furnished with T4A3786SSF wide throw hinges, closer arm and stop to achieve maximum door swing. Furnish mck T4A3786SSF std hinge where applicable, including at overhead door control/stop applications. Cps/cpsh overhead stops permitted “only” where absolutely deemed necessary as verified by a field survey of each work site, and shall be subject to review and approval by the District construction department.
    17. Some listed hw sets may not be used in the respective work.
    18. Exterior gym/mp/dining panic trim/cyls to be reviewed w/lockshop.
    19. Hold openers are not allowed on fire rated doors.
    20. **HARDWARE SETS** - Items listed in the following Finish Hardware Schedule shall conform to the specification. The last column in the hardware schedule refers to the manufacturer's abbreviation listed above. Internal/concealed vertical rod exit devices are not acceptable. If opening requires a vertical rod exit devise, use external/surface mounted vertical rod exit device only.

**HW1** [**EXTERIOR**/90-DEGREE/PANIC x MULLION@DINING-GYM-LIBR-MP-WIND BREAK] - EACH PAIR TO HAVE:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 6 EA. | HINGE | T4A3786 SSF | 652 | MCK |
| 1 EA. | EXIT DEVICE | 8804 | 630 | SGT |
| 1 EA. | EXIT DEVICE | 8810 | 630 | SGT |
| 1 EA. | REM. MULLION | 12-L980 | 600 | SGT |
| 2 EA. | CYLINDER | 1/10W0500x1/10W0403H | 626 | MED |
| 2 EA. | COLLAR | K24A | 626 | KEE |
| 2 EA. | PULL | 1097HASP | 630 | TRM |
| 2 EA. | CLOSER | 351-CPSH@WIND BREAK/KIT | 689 | SGT |
| 2 EA. | CLOSER | 351-CPS@BAL | 689 | SGT |
| 2 EA. | STOP | 1209HA@P10/PH10 | 630 | TRM |
| 2 EA. | KICKPLATE | K0050 10x2 LDW | 630 | TRM |
| 1 EA. | THRESHOLD | 2/196Ax192A OR AS REQ | 628 | PEM |
| 2 EA. | SWEEP | 321 CN | 628 | PEM |
| 1 EA. | DRIP CAP | 345A@HEAD AS REQ | 628 | PEM |
| 2 SET | SEAL | 2891 AS HD/JAMBS | 628 | PEM |

* MP/GYM EXIT ONLY [EO] APPLICATION TO BE REVIEWED WITH LOCKSHOP SUPV.
* P10/PH10 ARM WHERE APPLICABLE.

**HW1A** [**EXTERIOR**/180 DEGREE/PANICxMULLION@DINING-GYM-LIBR-MP-WIND BREAK] EACH PAIR TO HAVE:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 6 EA. | HINGE | T4A3786 SSF | 652 | MCK |
| 1 EA. | EXIT DEVICE | 8804 | 630 | SGT |
| 1 EA. | EXIT DEVICE | 8810 | 630 | SGT |
| 1 EA. | REM. MULLION | 12-L980 | 600 | SGT |
| 2 EA. | CYLINDER | 1/10W0500x1/10W0403H | 626 | MED |
| 2 EA. | COLLAR | K24A | 626 | KEE |
| 2 EA. | PULL | 1097HASP | 630 | TRM |
| 2 EA. | CLOSER | 351-PH10@WIND BREAK/KIT | 689 | SGT |
| 2 EA. | CLOSER | 351-P10@BAL | 689 | SGT |
| 2 EA. | KICKPLATE | K0050 10x2 LDW | 630 | TRM |
| 2 EA. | STOP | 1209HA | 630 | TRM |
| 1 EA. | THRESHOLD | 2/196Ax192A OR AS REQ | 628 | PEM |
| 2 EA. | SWEEP | 321CN | 628 | PEM |
| 1 EA. | DRIP CAP | 345A@HEAD AS REQ | 628 | PEM |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 2 SET | SEAL | 2891AS HD/JAMBS | 628 | PEM |

* MP/GYM EXIT ONLY [EO] APPLICATION TO BE REVIEWED WITH LOCKSHOP SUPV.

**HW2** [**EXTERIOR**/90 DEGREE/UNEQUAL/VERTICAL ROD PANIC] - EACH PAIR TO HAVE:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 6 EA. | HINGE | T4A3786 SSF | 652 | MCK |
| 1 EA. | EXIT DEVICE | 14-8710x306 | 630 | SGT |
| 1 EA. | EXIT DEVICE | 14-8710 | 630 | SGT |
| 2 EA. | CYLINDER | 10W0500 | 626 | MED |
| 2 EA. | COLLAR | K24A | 626 | KEE |
| 2 EA. | PULL | 1097HASP | 630 | TRM |
| 2 EA. | CLOSER | 351-CPS [CPSH@FMS DRS: H1,H2,H3,H7] | 689 | SGT |
| 2 EA. | KICKPLATE/GUARD | PG8002 10x1 LDW | 630 | TRM |
| 2 EA. | STOP | 1209HA@P10/PH10 | 630 | TRM |
| 1 EA. | THRESHOLD | 2/196Ax192A OR AS REQ | 628 | PEM |
| 2 EA. | SWEEP | 321CN | 628 | PEM |
| 1 SET | MEETING ASTRAGAL | 351CPK | 628 | PEM |
| 1 EA. | DRIP CAP | 345A@HEAD AS REQ | 628 | PEM |
| 1 SET | SEAL | 2891AS | 628 | PEM |

* MP/GYM EXIT [EO] ONLY APPLICATION TO BE REVIEWED WITH LOCKSHOP SUPV.
* FURNISH P10/PH10 ARM WHERE APPLICABLE.

**HW2A** [**EXTERIOR**/180 DEGREE/UNEQUAL/VERTICAL ROD PANIC] - EACH PAIR TO HAVE:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 6 EA. | HINGE | T4A3786 SSF | 652 | MCK |
| 1 EA. | EXIT DEVICE | 14-8710x306 | 630 | SGT |
| 1 EA. | EXIT DEVICE | 14-8710 | 630 | SGT |
| 2 EA. | CYLINDER | 10W0500 | 626 | MED |
| 2 EA. | COLLAR | K24A | 626 | KEE |
| 2 EA. | PULL | 1097HASP | 630 | TRM |
| 2 EA. | CLOSER | 351-P10 | 689 | SGT |
| 2 EA. | KICKPLATE/GUARD | PG8002 10x1 LDW | 630 | TRM |
| 2 EA. | STOP | 1209HA | 630 | TRM |
| 1 EA. | THRESHOLD | 2/196Ax192A OR AS REQ | 628 | PEM |
| 2 EA. | SWEEP | 321CN | 628 | PEM |
| 1 SET | MEETING ASTRAGAL | 351CPK | 628 | PEM |
| 1 EA. | DRIP CAP | 345A@HEAD AS REQ | 628 | PEM |
| 1 SET | SEAL | 2891AS HD/JAMBS | 628 | PEM |

**HW3** [**EXTERIOR**/90 DEGREE/PANIC@CLASSRM-CORRIDOR-RESTRM]-EACH SGL TO HAVE:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 3 EA. | HINGE | T4A3786 SSF | 652 | MCK |
| 1 EA. | EXIT DEVICE | 8804 | 630 | SGT |
| 1 EA. | CYLINDER | 10W0403H | 626 | MED |
| 1 EA. | COLLAR | K24A | 626 | KEE |
| 1 EA. | PULL | 1096HASP | 630 | TRM |
| 1 EA. | CLOSER | 351-CPSH@WIND BK/KIT/LOCK/RESTRM | 689 | SGT |
| 1 EA. | CLOSER | 351-CPS@BAL | 689 | SGT |
| 1 EA. | ARMOR PLATE | KA050 30x2 LDW@KIT | 630 | TRM |
| 1 EA. | KICKPLATE | K0050 10x2 LDW@BAL | 630 | TRM |
| 2 EA. | STOP | 1209HA@PH10/P10 | 630 | TRM |
| 1 EA. | THRESHOLD | 2/196Ax192A OR AS REQ | 628 | PEM |
| 1 EA. | SWEEP | 321CN | 628 | PEM |
| 1 EA. | DRIP CAP | 345A@HEAD AS REQ | 628 | PEM |
| 1 SET | SEAL | 2891AS HD/JAMBS | 628 | PEM |
| 1 EA. | SIGN | 753/754@RESTRM | BL | TRM |

* MP/GYM EXIT ONLY [EO] APPLICATION TO BE REVIEWED WITH LOCKSHOP SUPV.

**HW3A** [**EXTERIOR**/180 DEGREE/PANIC@CLASSRM-CORRIDOR-RESTRM] EACH SGL TO HAVE:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 3 EA. | HINGE | T4A3786 SSF | 652 | MCK |
| 1 EA. | EXIT DEVICE | 8804 | 630 | SGT |
| 1 EA. | CY LINDER | 10W0403H | 626 | MED |
| 1 EA. | COLLAR | K24A | 626 | KEE |
| 1 EA. | PULL | 1096HASP | 630 | TRM |
| 1 EA. | CLOSER | 351-PH10@WIND BK/KIT/LOCK/RESTRM | 689 | SGT |
| 1 EA. | CLOSER | 351-P10@BAL | 689 | SGT |
| 1 EA. | ARMOR PLATE | KA050 30x2 LDW@KIT | 630 | TRM |
| 1 EA. | KICKPLATE | K0050 10x2 LDW@BAL | 630 | TRM |
| 1 EA. | STOP | 1209HA | 630 | TRM |
| 1 EA. | THRESHOLD | 2/196Ax192A OR AS REQ | 628 | PEM |
| 1 EA. | SWEEP | 321CN | 628 | PEM |
| 1 EA. | DRIP CAP | 345A@HEAD AS REQ | 628 | PEM |
| 1 SET | SEAL | 2891AS HD/JAMBS | 628 | PEM |
| 1 EA. | SIGN | 753/754@RESTRM | BL | TRM |

* MP/GYM EXIT ONLY [EO] APPLICATION TO BE REVIEWED WITH LOCKSHOP SUPV.

**HW3B** [**EXTERIOR**/RATED/180 DEGREE/PANIC] - EACH SGL TO HAVE:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 3 EA. | HINGE | T4A3786 SSF | 652 | MCK |
| 1 EA. | EXIT DEVICE | 12-8843ETL | 630 | SGT |
| 1 EA. | CYLINDER | 10W0500 | 626 | MED |
| 1 EA. | COLLAR | K24A | 626 | KEE |
| 1 EA. | CLOSER | 351-P10 [CPS AS REQ] | 689 | SGT |
| 1 EA. | KICKPLATE | K0050 10x2 LDW | 630 | TRM |
| 1 EA. | STOP | 1209HA | 630 | TRM |
| 1 EA. | THRESHOLD | 2/196Ax192A OR AS REQ | 628 | PEM |
| 1 EA. | SWEEP | 321CN | 628 | PEM |
| 1 EA. | DRIP CAP | 345A@HEAD AS REQ | 628 | PEM |
| 1 SET | SEAL | 2891AS HD/JAMBS | 628 | PEM |
| 1 EA. | SIGN | 753/754@RESTRM | BL | TRM |

* MP/GYM EXIT ONLY [EO] APPLICATION TO BE REVIEWED WITH LOCKSHOP SUPV.

**HW4** [**EXTERIOR**/90 DEGREE/PANIC@JAN-MECH-STOR] - EACH SGL TO HAVE:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 3 EA. | HINGE | T4A3786 SSF | 652 | MCK |
| 1 EA. | EXIT DEVICE | 3828x28-K-HTB [04 FUNCTION] | PEN | SGT |
| 1 EA. | CYLINDER | 10W0403H | 626 | MED |
| 1 EA. | COLLAR | K24A | 626 | KEE |
| 1 EA. | PULL | 1096HASP | 630 | TRM |
| 1 EA. | CLOSER | 351-CPSH | 689 | SGT |
| 1 EA. | KICKPLATE | K0050 16x2 LDW@JAN [10”@RESTRM] | 630 | TRM |
| 1 EA. | THRESHOLD | 2/196Ax192A OR AS REQ | 628 | PEM |
| 1 EA. | SWEEP | 321CN | 628 | PEM |
| 1 EA. | DRIP CAP | 345A@HEAD AS REQ | 628 | PEM |
| 1 SET | SEAL | 2891AS HD/JAMBS | 628 | PEM |
| 1 EA. | SIGN | 753/754@RESTRM | BL | TRM |

**HW4A** [**EXTERIOR**/180 DEGREE/PANIC@JAN-MECH-STOR-RESTRM] - EACH SGL TO HAVE:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 3 EA. | HINGE | T4A3786 SSF | 652 | MCK |
| 1 EA. | EXIT DEVICE | 3828x28-K-HTB [04 FUNCTION] | PEN | SGT |
| 1 EA. | CYLINDER | 10W0403H | 626 | MED |
| 1 EA. | COLLAR | K24A | 626 | KEE |
| 1 EA. | PULL | 1096HASP | 630 | TRM |
| 1 EA. | CLOSER | 351-PH10 | 689 | SGT |
| 1 EA. | KICKPLATE | K0050 16x2 LDW@JAN [10”@RESTRM] | 630 | TRM |
| 1 EA. | STOP | 1209HA | 630 | TRM |
| 1 EA. | THRESHOLD | 2/196Ax192A OR AS REQ | 628 | PEM |
| 1 EA. | SWEEP | 321CN | 628 | PEM |
| 1 EA. | DRIP CAP | 345A@HEAD AS REQ | 628 | PEM |
| 1 SET | SEAL | 2891AS HD/JAMBS | 628 | PEM |
| 1 EA. | SIGN | 753/754@RESTRM | BL | TRM |

**HW4B [EXTERIOR**/90-180 DEGREE/PANIC@DUTCH ] - EACH DUTCH TO HAVE:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 3 EA. | HINGE | T4A3786 SSF | 652 | MCK |
| 1 EA. | EXIT DEVICE | 3828X28-K-HTB {04 FUNCTION} | PEN | SGT |
| 1 EA. | DEADLOCK | 8220 {INSTALL CYL@INSIDE} | 626 | SGT |
| 2 EA. | CYLINDER | 10W0403HK24A | 626 | MED |
| 2 EA. | COLLAR | K24A | 626 | KEE |
| 1 EA. | PULL | 1096HASP | 630 | TRM |
| 1 EA. | CLOSER | 351-PH10 {CPSH AS REQ} | 689 | SGT |
| 1 EA. | KICKPLATE | K0050 10X2 LDW | 630 | TRM |
| 2 EA. | STOP | 1209HA (1270CVPV@TOP SHELF) | 630 | TRM |
| 2 EA. | THRESHOLD | 2/196Ax192A OR AS REQ | 628 | PEM |
| 1 EA | SWEEP | 321CN | 628 | PEM |
| 1 EA. | DRIP CAP | 345A@HEAD AS REQ | 628 | PEM |
| 1 SET | SEAL | 2891AS HD JAMBS | 628 | PEM |

* SHELF BY DR SUP. INSTALL DL@TOP LEAF BTM RAIL.

**HW4C** [**EXTERIOR**/RATED/90-180 DEGREE/PANIC@JAN-MECH-STOR] - EACH SGL TO HAVE:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 3 EA. | HINGE | T4A3786 SSF | 652 | MCK |
|  | EXIT DEVICE | 12-3828x28-K-HTB [04 FUNCTION] | PEN | SGT |
| 1 EA. | CYLINDER | 10W0403H | 626 | MED |
| 1 EA. | COLLAR | K24A | 626 | KEE |
| 1 EA. | PULL | 1096HASP | 630 | TRM |
| 1 EA. | CLOSER | 351-P10 [CPS AS REQ] | 689 | SGT |
| 1 EA. | KICKPLATE | K0050 16x2 LDW@JAN [10”@RESTRM] | 630 | TRM |
| 1 EA. | STOP | 1209HA | 630 | TRM |
| 1 EA. | THRESHOLD | 2/196Ax192A | 628 | PEM |
| 1 EA. | SWEEP | 321CN | 628 | PEM |
| 1 EA. | DRIP CAP | 345A@HEAD AS REQ | 628 | PEM |
| 1 SET | SEAL | 2891AS HD/JAMBS | 628 | PEM |
| 1 EA. | SIGN | 753/754@RESTRM AS REQ | BL | TRM |

**HW5** [**EXTERIOR**/90-180 DEGREE/PANICxMULLION@MECH-STOR] - EACH PAIR TO HAVE:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 6 EA. | HINGE | T4A3786 SSF | 652 | MCK |
| 1 EA. | EXIT DEVICE | 3828x28-K-HTB [04 FUNCTION] | PEN | SGT |
| 1 EA. | EXITDEVICE | 3828 | PEN | SGT |
| 1 EA. | MULLION | 12-L980 | 600 | SGT |
| 2 EA. | CYLINDER | 10W0500x10W0403H | 626 | MED |
| 2 EA. | COLLAR | K24A | 626 | KEE |
| 1 EA. | PULL | 1097HASP | 630 | TRM |
| 2 EA. | CLOSER | 351-PH10 [CPSH AS REQ] | 689 | SGT |
| 1 EA. | THRESHOLD | 2/196Ax192A OR AS REQ | 628 | PEM |
| 2 EA. | KICKPLATE | K0050 10x2 LDW@RESTRM | 630 | TRM |
| 2 EA. | STOP | 1209HA | 630 | TRM |
| 2 EA. | SWEEP | 321CN | 628 | PEM |
| 1 EA. | DRIP CAP | 345A@HEAD AS REQ | 628 | PEM |
| 2 SET | SEAL | 2891AS HD/JAMBS | 628 | PEM |
| 1 EA. | SIGN | 753/754@RESTRM AS REQ | BL | TRM |

**HW5A** [EXTERIOR/RATED/90 DEGREE/PANICxMULLION@MECH-STOR] - EACH PAIR TO HAVE:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 6 EA. | HINGE | T4A3786 SSF | 652 | MCK |
| 1 EA. | EXIT DEVICE | 12-3828x28-K-HTB [04 FUNCTION] | PEN | SGT |
| 1 EA. | EXIT DEVICE | 12-3828 | PEN | SGT |
| 1 EA. | MULLION | 12-L980 | 600 | SGT |
| 2 EA. | CYLINDER | 10W0500x10W0403H | 626 | MED |
| 2 EA. | COLLAR | K24A | 626 | KEE |
| 1 EA. | PULL | 1097HASP | 630 | TRM |
| 2 EA. | CLOSER | 351-CPS | 689 | SGT |
| 1 EA. | THRESHOLD | 2/196Ax192A | 628 | PEM |
| 2 EA. | SWEEP | 321CN | 628 | PEM |
| 1 EA. | DRIP CAP | 345A@HEAD AS REQ | 628 | PEM |
| 2 SET | SEAL | 2891AS HD/JAMBS | 628 | PEM |

**HW6** [**EXTERIOR**/90 DEGREE/STOR LOCK@JAN-MECH-STOR] - EACH PAIR TO HAVE:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 6 EA. | HINGE | T4A3786 SSF | 652 | MCK |
| 1 EA. | LOCKSET | 23-8206LNL | 626 | SGT |
| 1 EA. | CYLINDER | 10W0500 | 626 | MED |
| 1 EA. | COLLAR | K24A | 626 | KEE |
| 1 SET | FLUSHBOLT | 3900x3911DPS | 626 | TRM |
| 1 EA. | PULL | 1097HAxCFC | 630 | TRM |
| 1 EA. | CLOSER | 351-CPSH [H@INSWG] | 689 | SGT |
| 2 EA. | KICKPLATE | K0050 16x1 LDW@JAN | 630 | TRM |
| 1 EA. | OVERHEAD STOP | 590H@OUTSWG INACT | 626 | SGT |
| 2 EA. | STOP | 1270CVPV@INSWG | 630 | TRM |
| 1 EA. | RAMP THRESHOLD | 2/196Ax192A AS REQ | 628 | PEM |
| 1 EA. | ASTRAGAL | 1/8x2” TRIMMED FOR 1097HA | 630 | TRM |
| 2 EA. | SWEEP | 321CN | 628 | PEM |
| 1 EA. | DRIP CAP | 345A@HEAD AS REQ | 628 | PEM |
| 1 SET | SEAL | 2891AS HD/JAMBS | 628 | PEM |

**HW7** [**EXTERIOR**/INSWG/STOR LOCK@JAN-MECH-STOR] - EACH SGL TO HAVE:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 3 EA. | HINGE | T4A3786 SSF | 652 | MCK |
| 1 EA. | LOCKSET | 8206LNL | 626 | SGT |
| 1 EA. | CYLINDER | 10W0500 | 626 | MED |
| 1 EA. | COLLAR | K24A | 626 | KEE |
| 1 EA. | PULL | 1097HAxCFC | 630 | TRM |
| 1 EA. | CLOSER | 351-H | 689 | SGT |
| 1 EA. | KICKPLATE | K0050 16x2 LDW@JAN | 630 | TRM |
| 1 EA. | STOP | 1270CVPV | 630 | TRM |
| 1 EA. | THRESHOLD | 2/196Ax192A OR AS REQ | 628 | PEM |
| 1 EA. | SWEEP | 321CN | 628 | PEM |
| 1 SET | SEAL | 2891AS HD/JAMBS | 628 | PEM |

**HW8** [**EXTERIOR**/INSWG/LOCK W/DEADBOLT@ADMIN] - EACH SGL TO HAVE:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 3 EA. | HINGE | T4A3786 SSF | 652 | MCK |
| 1 EA. | LOCKSET | 8245LNL | 626 | SGT |
| 1 EA. | CYLINDER | 10W0500 | 626 | MED |
| 1 EA. | COLLAR | K24A | 626 | KEE |
| 1 EA. | CLOSER | 351-0 | 689 | SGT |
| 1 EA. | KICKPLATE | K0050 10x2 LDW | 630 | TRM |
| 1 EA. | WALL STOP | 1270SV | 630 | TRM |
| 1 EA. | THRESHOLD | 2/196Ax192A OR AS REQ | 628 | PEM |
| 1 EA. | SWEEP | 321CN | 628 | PEM |
| 1 SET | SEAL | 2891AS HD/JAMBS | 628 | PEM |

**HW9** [**EXTERIOR**/INSWG/DOGGED LOCKSET@LOCKER-RESTRM] - EACH SGL TO HAVE:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 3 EA. | HINGE | T4A3786 SSF | 652 | PEM |
| 1 EA. | LOCKSET | 8291LNL | 626 | SGT |
| 1 EA. | CYLINDER | 10W0500 | 626 | MED |
| 1 EA. | COLLAR | K24A | 626 | KEE |
| 1 EA. | PULL | 1097HAxCFC | 630 | TRM |
| 1 EA. | CLOSER | 351-HT | 689 | SGT |
| 1 EA. | KICKPLATE | K0050 10x2 LDW | 630 | TRM |
| 1 EA. | MOP PLATE | KM050 6x1 LDW | 630 | TRM |
| 1 EA. | STOP | 1270CVPV | 630 | TRM |
| 1 EA. | THRESHOLD | 2/196Ax192A OR AS REQ | 628 | PEM |
| 1 EA. | SWEEP | 321CN | 628 | PEM |
| 1 SET | SEAL | 2891AS HD/JAMBS | 628 | PEM |
| 1 EA. | SIGN | 753/754@RESTRM | BL | TRM |

**HW9A** [EXTERIOR/OUTSWG/DOGGED LOCKSET@MULTI-OCCUP RESTRM]-EACH SGL TO HAVE:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 3 EA. | HINGE | T4A3786 SSF | 652 | PEM |
| 1 EA. | LOCKSET | 8291LNL | 626 | SGT |
| 1 EA. | CYLINDER | 10W0500 | 626 | MED |
| 1 EA. | COLLAR | K24A | 626 | KEE |
| 1 EA. | PULL | 1096HAxCFC | 630 | TRM |
| 1 EA. | CLOSER | 351-PH10 [CPSH AS REQ] | 689 | SGT |
| 1 EA. | KICKPLATE | K0050 10x2 LDW | 630 | TRM |
| 1 EA. | STOP | 1209HA | 630 | TRM |
| 1 EA. | THRESHOLD | 2/196Ax192A OR AS REQ | 628 | PEM |
| 1 EA. | SWEEP | 321CN | 628 | PEM |
| 1 SET | SEAL | 2891AS HD/JAMBS | 628 | PEM |
| 1 EA. | SIGN | 753/754 | BL | TRM |

**HW9B** [**INTERIOR**/DOGGED LOCKSET@LOCKER-MULTI-OCCUP RESTRM]-EACH SGL TO HAVE:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 3 EA. | HINGE | T4A3786 SSF | 652 | PEM |
| 1 EA. | LOCKSET | 8291LNL | 626 | SGT |
| 1 EA. | CYLINDER | 10W0500 | 626 | MED |
| 1 EA. | COLLAR | 861A | 626 | ILC |
| 1 EA. | PULL | 1097HAxCFC | 630 | TRM |
| 1 EA. | CLOSER | 351-P10 [0T@INSWG] [CPS AS REQ] | 689 | SGT |
| 1 EA. | KICKPLATE | K0050 10x1/2 LDW | 630 | TRM |
| 1 EA. | MOP PLATE | KM050 6x1/2 LDW | 630 | TRM |
| 1 EA. | WALL STOP | 1270CVPV | 630 | TRM |
| 3 EA. | SILENCER | 1229A/B AS REQ | GR | TRM |
| 1 EA. | SIGN | 753/754@RESTRM | BL | TRM |

* FURNISH 351-PH10/HT@LOCKER RESTRM. LOCK CYL AT RESTRM SIDE-REVIEW W/DIST.

**HW10** [**INTERIOR**/PANIC@CORR-CLASSRM] - EACH SGL TO HAVE:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 3 EA. | HINGE | T4A3786 SSF | 652 | MCK |
| 1 EA. | EXIT DEVICE | 8813ETL | 630 | SGT |
| 1 EA. | CYLINDER | 10W0500 | 626 | MED |
| 1 EA. | COLLAR | 861A | 626 | ILC |
| 1 EA. | CLOSER | 351-P10 [CPS AS REQ] | 689 | SGT |
| 1 EA. | KICKPLATE | K0050 10x2 LDW | 630 | TRM |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 1 EA. | WALLSTOP | 1270CVPV | 630 | TRM |
| 3 EA. | SILENCER | 1229A/B AS REQ | GR | TRM |

**HW10A** [**INTERIOR**/RATED/PANIC@CORR-CLASSRM] - EACH SGL TO HAVE:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 3 EA. | HINGE | T4A3786 SSF | 652 | PEM |
| 1 EA. | EXIT DEVICE | 12-8813ETL | 630 | SGT |
| 1 EA. | CYLINDER | 10W0500 | 626 | MED |
| 1 EA. | COLLAR | 861A | 626 | ILC |
| 1 EA. | CLOSER | 351-P10 [CPS AS REQ] | 689 | SGT |
| 1 EA. | KICKPLATE | K0050 10x2 LDW | 630 | TRM |
| 1 EA. | WALLSTOP | 1270CVPV | 630 | TRM |
| 1 EA. | THRESHOLD | 2/196Ax192A WELDED@45M+ |  | PEM |
| 1 SET | SEAL | 2891AS HD/JAMBS | 628 | PEM |
| 1 SET | SEAL | HSS2000 HD/JAMBS @WD | N/A | PEM |

**HW11** [**INTERIOR**/RATED/SURFACE VR PANIC@CORR-MP-LIBR] - EACH PAIR TO HAVE:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 6 EA. | HINGE | T4A3786 SSF | 652 | PEM |
| 1 EA. | EXIT DEVICE | 12-8713ETL | 630 | SGT |
| 1 EA. | EXIT DEVICE | 12-8710 | 630 | SGT |
| 1 EA. | CYLINDER | 10W0500 | 626 | MED |
| 1 EA. | COLLAR | 861A | 626 | ILC |
| 2 EA. | CLOSER | 351-P10 [CPS AS REQ] | 689 | SGT |
| 2 EA. | KICKPLATE/GUARD | PG8002 10x1 LDW | 630 | TRM |
| 2 EA. | WALL STOP | 1270CVPV | 630 | TRM |
| 1 EA. | THRESHOLD | 2/196Ax192A WELDED@45M+ |  | PEM |
| 1 SET | MEETING ASTRAGAL | 351CPK | 628 | PEM |
| 1 SET | SEAL | 2891AS HD/JAMBS | 628 | PEM |
| 1 SET | SEAL | HSS2000 HD/JAMBS@WD | N/A | PEM |

**HW12** [**INTERIOR**/RATED/STOR LOCKSET@JAN-STOR] - EACH SINGLE TO HAVE:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 3 EA. | HINGE | T4A3786 4.5 x 4.5 | 652 | MCK |
| 1 EA. | LOCKSET | 8204LNL | 626 | SGT |
| 1 EA. | CYLINDER | 10W0500 | 626 | MED |
| 1 EA. | COLLAR | 861A | 626 | ILC |
| 1 EA. | CLOSER | 351-CPS [0@INSWG] | 689 | SGT |
| 1 EA. | KICKPLATE | K0050 16x2 LDW@JAN | 630 | TRM |
| 1 EA. | WALL STOP | 1270CVPV@INSWG | 630 | TRM |
| 1 EA. | THRESHOLD | 2/196Ax192A WELDED@45M+ |  | PEM |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 1 SET | SEAL | 2891AS HD/JAMBS | 628 | PEM |
| 1 SET | SEAL | HSS2000 HD/JAMBS@WD | N/A | PEM |

**HW12A** [**INTERIOR**/STOR LOCKSET@JAN-STOR] - EACH SINGLE TO HAVE:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 3 EA. | HINGE | T4A3786 4.5 x 4.5 | 652 | MCK |
| 1 EA. | LOCKSET | 8204LNL | 626 | SGT |
| 1 EA. | CYLINDER | 10W0500 | 626 | MED |
| 1 EA. | COLLAR | 861A | 626 | ILC |
| 1 EA. | KICKPLATE | K0050 16x2 LDW@JAN | 630 | TRM |
| 1 EA. | OVERHEAD STOP | 590H SERIES AS REQ | 626 | SGT |
| 1 EA. | WALL STOP | 1270CVPV@BAL | 630 | TRM |
| 3 EA. | SILENCER | 1229A/B AS REQ | GR | TRM |

**HW13** [**INTERIOR**/RATED/STOR LOCKSET@MECH-STOR] - EACH PAIR TO HAVE:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 6 EA. | HINGE | T4A3786 4.5 x 4.5 | 652 | MCK |
| 1 EA. | LOCKSET | 23-8204LNL | 626 | SGT |
| 1 EA. | CYLINDER | 10W0500 | 626 | MED |
| 1 EA. | COLLAR | 861A | 626 | ILC |
| 1 SET | MAN FLUSHBOLT | 3913/17x3910/11DPS AS REQ | 626 | TRM |
| 1 EA. | CLOSER | 351-CPS [0@INSWG] | 689 | SGT |
| 1 EA. | OVERHEAD STOP | 590S SERIES@INACT | 626 | SGT |
| 2 EA. | STOP | 1270CVPV | 630 | TRM |
| 1 EA. | ASTRAGAL | 357SP | 600 | PEM |
| 1 EA. | THRESHOLD | 2/196Ax192A WELDED@45M+ |  | PEM |
| 1 SET | SEAL | 2891AS HD/JAMBS | 628 | PEM |
| 1 SET | SEAL | HSS2000 HD/JAMBS@WD | N/A | PEM |

**HW13A** [**INTERIOR**/STOR LOCKSET@MECH-STOR] - EACH PAIR TO HAVE:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 6 EA. | HINGE | T4A3786 4.5 x 4.5 | 652 | MCK |
| 1 EA. | LOCKSET | 23-8204LNL | 626 | SGT |
| 1 EA. | CYLINDER | 10W0500 | 626 | MED |
| 1 EA. | COLLAR | 861A | 626 | ILC |
| 1 SET | MAN FLUSHBOLT | 3913/17x3910DPS AS REQ | 626 | TRM |
| 1 EA. | CLOSER | 351-CPSH [H@INSWG] | 689 | SGT |
| 1 EA. | OVERHEAD STOP | 590H SERIES@INACT | 626 | SGT |
| 2 EA. | STOP | 1270CVPV@INSWG | 630 | TRM |
| 1 EA. | ASTRAGAL | 357SP | 600 | PEM |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 2 EA. | SILENCER | 1229A/B AS REQ | GR | TRM |

**HW14** [**INTERIOR**/OFFICE LOCKSET@OFFICE] - EACH SGL TO HAVE:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 3 EA. | HINGE | T4A3786 4.5 x 4.5 | 652 | MCK |
| 1 EA. | LOCKSET | 8205LNL | 626 | SGT |
| 1 EA. | CYLINDER | 10W0500 | 626 | MED |
| 1 EA. | COLLAR | 861A | 626 | ILC |
| 1 EA. | OVERHEAD STOP | 590H SERIES AS REQ | 626 | SGT |
| 1 EA. | WALL STOP | 1270CVPV | 630 | TRM |
| 3 EA. | SILENCER | 1229A/B | GR | TRM |

**HW15** [**INTERIOR**/RATED/CLASSRM LOCKSET@CLASSRM-TEACH WORK]-EACH SGL TO HAVE:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 3 EA. | HINGE | T4A3786 | 652 | MCK |
| 1 EA. | LOCKSET | 8237LNL | 626 | SGT |
| 1 EA. | CYLINDER | 10W0500 | 626 | MED |
| 1 EA. | COLLAR | 861A | 626 | ILC |
| 1 EA. | CLOSER | 351-P10 [0@INSWG] [CPS@KIT&AS REQ] | 689 | SGT |
| 1 EA. | KICKPLATE | K0050 10x1/2 LDW | 630 | TRM |
| 1 EA. | WALL STOP | 1270CVPV | 630 | TRM |
| 1 EA. | THRESHOLD | 2/196Ax192A WELDED@45M+ |  | PEM |
| 1 SET | SEAL | 2891AS HD/JAMBS | 628 | PEM |
| 1 SET | SEAL | HSS2000 HD/JAMBS@WD | N/A | PEM |

**HW16** [**INTERIOR**/RATED/CLASSRM LOCKSET@MULTI-OCCUP RESTRM] - EACH SGL TO HAVE:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 3 EA. | HINGE | T4A3786 | 652 | MCK |
| 1 EA. | LOCKSET | 8237LNL | 626 | SGT |
| 1 EA. | CYLINDER | 10W0500 | 626 | MED |
| 1 EA. | COLLAR | 861A | 626 | ILC |
| 1 EA. | CLOSER | 351-P10 [0@INSWG] [CPS AS REQ] | 689 | SGT |
| 1 EA. | KICKPLATE | K0050 10x2 LDW | 630 | TRM |
| 1 EA. | MOP PLATE | KM050 6x1/2 LDW@INSWG | 630 | TRM |
| 1 EA. | WALL STOP | 1270CVPV | 630 | TRM |
| 1 EA. | THRESHOLD | 2/196Ax192A WELDED@45M+ |  | PEM |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 1 SET | SEAL | 2891AS HD/JAMBS | 628 | PEM |
| 1 SET | SEAL | HSS2000 HD/JAMBS@WD | N/A | PEM |
| 1 EA. | SIGN | 753/754 AS REQ | BL | TRM |

**HW17** [**INTERIOR**/RATED/CLASSRM LOCKSETxAUTO FBxCOORD@CLASSRM] EACH PAIR TO HAVE:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 6 EA. | HINGE | T4A3786 | 652 | MCK |
| 1 EA. | LOCKSET | 23-8237LNL | 626 | SGT |
| 1 EA. | CYLINDER | 10W0500 | 626 | MED |
| 1 EA. | COLLAR | 861A | 626 | ILC |
| 1 SET | AUTO FLUSHBOLT | 3810/15x3910/11DPS AS REQ | 626 | TRM |
| 2 EA. | CLOSER | 351-P10 [0@INSWG] [CPS AS REQ] | 689 | SGT |
| 1 EA. | COORDINATOR | 3094[2/3090 BKT@P10/CPS] | 600 | TRM |
| 2 EA. | KICKPLATE | K0050 10x1 LDW | 630 | TRM |
| 2 EA. | WALL STOP | 1270CVPV | 630 | TRM |
| 1 EA. | THRESHOLD | 2/196Ax192A WELDED@45M+ |  | PEM |
| 1 EA. | ASTRAGAL | 357SP | 600 | PEM |
| 1 SET | SEAL | 2891AS HD/JAMBS | 628 | PEM |
| 1 SET | SEAL | HSS2000 HD/JAMBS@WD | N/A | PEM |

**HW18** [**INTERIOR**/CLASSRM LOCKSET@CLASSRM] - EACH SGL TO HAVE:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 3 EA. | HINGE | T4A3786 | 652 | MCK |
| 1 EA. | LOCKSET | 8237LN L | 626 | SGT |
| 1 EA. | CYLINDER | 10W0500 | 626 | MED |
| 1 EA. | COLLAR | 861A | 626 | ILC |
| 1 EA. | CLOSER | 351-PH10 [H@INSWG] [CPSH AS REQ] | 689 | SGT |
| 1 EA. | KICKPLATE | K0050 10x1/2 LDW | 630 | TRM |
| 1 EA. | WALL STOP | 1270CVPV | 630 | TRM |
| 3 EA. | SILENCER | 1229A/B AS REQ | GR | TRM |

**HW19** [**INTERIOR**/PRIVACY LOCK@STAFF RESTRM] EACH SGL TO HAVE:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 3 EA. | HINGE | T4A3786 | 652 | MCK |
| 1 EA. | PRIVACY LOCK | 8265LNLxTICE OCCUP. IND. | 626 | SGT. |
| 1 EA. | CLOSER | 351-CPS [0@INSWG] | 689 | SGT |
| 1 EA. | MOP PLATE | KM050 6x1/2 LDW | 630 | TRM |
| 1 EA. | WALL STOP | 1270SV@INSWG | 630 | TRM |
| 1 EA. | COAT HOOK | 3071 [INSTALL@48”FFF] | 626 | TRM |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 1 SET | SD SEAL | 2891AS HD/JAMBS | 628 | PEM |
| 1 EA. | SIGN | 752/753/754 | BL | TRM |

**HW19A** [INTERIOR/RATED/PRIVACY LOCK@STAFF RESTRM] - EACH SGL TO HAVE:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 3 EA. | HINGE | T4A3786 | 652 | MCK |
| 1 EA. | PRIVACY LOCK | 8265LNLxTICE OCCUP. IND. | 626 | SGT. |
| 1 EA. | CLOSER | 351-CPS [0@INSWG] | 689 | SGT |
| 1 EA. | MOP PLATE | KM050 6x1/2 LDW | 630 | TRM |
| 1 EA. | STOP | 1270CVPV | 630 | TRM |
| 1 EA. | COAT HOOK | 3071 [INSTALL@48”FFF] | 626 | TRM |
| 1 EA. | THRESHOLD | 2/196Ax192A WELDED@45M+ |  | PEM |
| 1 SET | SEAL | 2891AS HD/JAMBS | 628 | PEM |
| 1 SET | SEAL | HSS2000 HD/JAMBS@WD | N/A | PEM |
| 1 EA. | SIGN | 752/753/754 | BL | TRM |

**HW20** [**EXTERIOR**/HOTEL LOCKSET@STAFF RESTRM] - EACH SGL TO HAVE:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 3 EA. | HINGE | T4A3786 SSF | 628 | MCK |
| 1 EA. | LOCKSET | 8250LNLxTICE OCCUP. IND. | 626 | SGT |
| 1 EA. | CYLINDER | 10W0500 | 626 | MED |
| 1 EA. | COLLAR | K24A | 626 | KEE |
| 1 EA. | CLOSER | 351-CPS [0@INSWG] | 689 | SGT |
| 1 EA. | MOP PLATE | KM050 6x1/2 LDW | 630 | TRM |
| 1 EA. | WALL STOP | 1270CVPV@INSWG | 630 | TRM |
| 1 EA. | COAT HOOK | 3071 [INSTALL@48”FFF] | 626 | TRM |
| 1 EA. | THRESHOLD | 2/196Ax192A OR AS REQ | 628 | PEM |
| 1 EA. | SWEEP | 321CN | 628 | PEM |
| 1 EA. | DRIP CAP | 345A@HEAD AS REQ | 628 | PEM |
| 1 SET | SEAL | 2891AS HD/JAMBS | 628 | PEM |
| 1 EA. | SIGN | 752/753/754 | BL | TRM |

* FURNISH 2 EA. EMERGENCY KEYS.

**HW20A** [**INTERIOR**/HOTEL LOCKSET@STAFF RESTRM] - EACH SGL TO HAVE:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 3 EA. | HINGE | T4A3786 | 652 | MCK |
| 1 EA. | LOCKSET | 8250LNLxTICE OCCUP. IND. | 626 | SGT |
| 1 EA. | CYLINDER | 10W0500 | 626 | MED |
| 1 EA. | COLLAR | 861A | 626 | ILC |
| 1 EA. | CLOSER | 351-CPS [0@INSWG] | 689 | SGT |
| 1 EA. | MOP PLATE | KM050 6x1/2 LDW | 630 | TRM |
| 1 EA. | WALL STOP | 1270CVPV | 630 | TRM |
| 1 EA. | COAT HOOK | 3071 [INSTALL@48”FFF] | 626 | TRM |
| 1 SET | SD SEAL | 2891AS HD/JAMBS | 628 | TRM |
| 1 EA. | SIGN | 752/753/754 | BL | TRM |

* FURNISH 2 EA. EMERGENCY KEYS.

**HW21** [**INTERIOR**/PASSAGE SET@KG RESTRM] - EACH SGL TO HAVE:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 3 EA. | HINGE | T4A3786 | 652 | MCK |
| 1 EA. | PASSAGE SET | 8215LNL | 626 | SGT |
| 1 EA. | MOP PLATE | KM050 6x1/2 LDW | 630 | TRM |
| 1 EA. | OVERHEAD STOP | 590S SERIES AS REQ | 626 | SGT |
| 1 EA. | WALL STOP | 1270CVPV@INSWG | 630 | TRM |
| 3 EA. | SILENCER | 1229A/B AS REQ | GR | TRM |
| 1 EA. | SIGN | 752@KG RESTRM | BL | TRM |

**HW22** [**INTERIOR**/RATED/PASSAGE SET@KG RESTRM] - EACH SGL TO HAVE:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 3 EA. | HINGE | T4 A3786 4.5x4.5 [STA@KG RESTRM] | 652 | MCK |
| 1 EA. | PASSAGE SET | 8215LNL | 626 | SGT |
| 1 EA. | CLOSER | 351-CPS [0@INSWG] | 689 | SGT |
| 1 EA. | MOP PLATE | KM050 6x1/2 LDW | 630 | TRM |
| 1 EA. | WALL STOP | 1270CVPV@INSWG | 630 | TRM |
| 1 EA. | THRESHOLD | 2/196Ax192A WELDED@45M+ |  | PEM |
| 1 SET | SEAL | 2891AS HD/JAMBS | 628 | PEM |
| 1 SET | SEAL | HSS2000 HD/JAMBS@WD | 628 | PEM |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 1 EA. | SIGN | 752@KG RESTRM | BL | TRM |

**HW23** [**INTERIOR**/PUSH-PULLxDOGGED LOCKSET@MULTI-OCCUP RESTRM] EACH SGL TO HAVE:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 3 EA. | HINGE | T4A3786 | 628 | MCK |
| 1 EA. | LOCKSET | 8291LNL | 626 | SGT |
| 1 EA. | CYLINDER | 10W0500 | 626 | MED |
| 1 EA. | COLLAR | 861A | 626 | ILC |
| 1 EA. | PULL | 1097HAxCFC | 630 | TRM |
| 1 EA. | CLOSER | 351-P10 [0T@INSWG] [CPS AS REQ] | 689 | SGT |
| 1 EA. | KICKPLATE | K0050 10x1/2 LDW | 630 | TRM |
| 1 EA. | MOP PLATE | KM050 6x1/2 LDW | 630 | TRM |
| 1 EA. | WALL STOP | 1270CVPV | 630 | TRM |
| 3 EA. | SILENCER | 1229A/B AS REQ | GR | TRM |
| 1 EA. | SIGN | 753/754 | BL | TRM |

* FURNISH HDWE IN US10B AT “FMS” DRS: H6 & H10.
* INSTALL LOCL CYLINDER AT RESTRM SIDE WERE APPLICABLE.
* FURNISH CLOSER 351-HT [HOLD-OPEN] AT INSWINGING RESTRM DRS: WERE APPLICABLE.

**HW24** [**INTERIOR**/PUSH-PULL@WHERE REQ] - EACH SGL TO HAVE:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 3 EA. | HINGE | T4A3786 | 652 | MCK |
| 1 EA. | PULL | 1017-3B | 630 | TRM |
| 1 EA. | PUSH | 1001-11 | 630 | TRM |
| 1 EA. | CLOSER | 351-PH10 [351-H@INSWG] | 689 | SGT |
| 1 EA. | KICKPLATE | K0050 10x1/2 LDW | 630 | TRM |
| 1 EA. | WALL STOP | 1270SV | 630 | TRM |
| 3 EA. | SILENCER | 1229A/B AS REQ | GR | TRM |

NOTE**:** 10L AS LISTED AND REQUIRED AT DOORS TEMPLATED FOR CYLINDRICAL KNOB LOCKS.

**HW25** [**EXISTING**/OFFICE LOCKSET@OFFICE] - EACH SGL TO HAVE:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 3 EA. | HINGE | T4A3786 | 652 | MCK |
| 1 EA. | LOCKSET | 30-10G05LL | 626 | SGT |
| 1 EA. | CYLINDER | 20W20049 | 626 | MED |
| 1 EA. | STOP | 1270CVPV | 630 | TRM |
| 3 EA. | SILENCER | 1229A/B AS REQ | GR | TRM |

**HW26** [**EXISTING**/OFFICE LOCKSETxCLOSER@OFFICE] - EACH SGL TO HAVE:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 3 EA. | HINGE | T4A3786 SSF | 652 | MCK |
| 1 EA. | LOCKSET | 30-10G05LL | 626 | SGT |
| 1 EA. | CYLINDER | 20W20049 | 626 | MED |
| 1 EA. | CLOSER | 351-PH10 [H@INSWG] [CPSH AS REQ] | 689 | SGT |
| 1 EA. | STOP | 1270CVPV | 630 | TRM |
| 3 EA. | SILENCER | 1229A/B AS REQ | GR | TRM |

**HW27** [**EXISTING**/STOR LOCKSETxCLOSER@JAN-MECH-STOR] - EACH SGL TO HAVE:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 3 EA. | HINGE | T4A3786 SSF | 652 | MCK |
| 1 EA. | LOCKSET | 30-10G04LL | 626 | SGT |
| 1 EA. | CYLINDER | 20W20049 | 626 | MED |
| 1 EA. | CLOSER | 351-PH10 [H@INSWG] [CPSH AS REQ] | 689 | SGT |
| 1 EA. | STOP | 1270CVPV | 630 | TRM |
| 3 EA. | SILENCER | 1229A/B AS REQ | GR | TRM |

**HW27A** [**EXISTING**/STOR LOCKSET@JAN-MECH-STOR] - EACH SGL TO HAVE:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 3 EA. | HINGE | T4A3786 4.5x4.5 | 652 | MCK |
| 1 EA. | LOCKSET | 30-10G04LL | 626 | SGT |
| 1 EA. | CYLINDER | 20W20049 | 626 | MED |
| 1 EA. | STOP | 1270CVPV | 630 | TRM |
| 3 EA. | SILENCER | 1229A/B AS REQ | GR | TRM |

**HW28** [**EXISTING**/STOR LOCKSETxFLUSHBOLT@MECH-STOR] - EACH PAIR TO HAVE:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 6 EA. | HINGE | T4A3786 SSF | 652 | MCK |
| 1 EA. | LOCKSET | 23-30-41-10G04LL | 626 | SGT |
| 1 EA. | CYLINDER | 20W20049 | 626 | MED |
| 1 SET | FLUSHBOLT | 3913/17x3910/11DPS AS REQ | 626 | TRM |
| 1 EA. | CLOSER | 351-PH10 [H@INSWG] [CPSH AS REQ] | 689 | SGT |
| 1 EA. | OVERHEAD STOP | 590H SERIES@INACT | 626 | SGT |
| 2 EA. | STOP | 1270CVPV | 630 | TRM |
| 2 EA. | SILENCER | 1229A/B AS REQ | GR | TRM |

**HW29** [**EXISTING**/CLASSRM LOCKSETxAUTO FB@CLASSRM-TEACH WORK] EACH PAIR TO HAVE:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 6 EA. | HINGE | T4A3786 SSF | 652 | MCK |
| 1 EA. | LOCKSET | 23-30-41-10G37LL | 626 | SGT |
| 1 EA. | CYLINDER | 20W20049 | 626 | MED |
| 1 SET | AUTO FLUSHBOLT | 3810/15x3910/11DPS AS REQ | 626 | TRM |
| 2 EA. | CLOSER | 351-PH10 [H@INSWG] [CPSH AS REQ] | 689 | SGT |
| 1 EA. | COORDINATOR | 3094 [2/3090@P10/CPSH] | 600 | TRM |
| 2 EA. | STOP | 1270CVPV | 630 | TRM |
| 1 EA. | ASTRAGAL | 357SP | 600 | TRM |
| 2 EA. | SILENCER | 1229A/B AS REQ | GR | TRM |

**HW30** [**EXISTING**/CLASSRM LOCKSETxCLOSER@CONF-OPEN OFFICE-TEACH WORK] EACH SGL TO HAVE:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 3 EA. | HINGE | T4A3786 SSF | 652 | MCK |
| 1 EA. | LOCKSET | 30-10G37LL | 626 | SGT |
| 1 EA. | CYLINDER | 20W20049 | 626 | MED |
| 1 EA. | CLOSER | 351-PH10 [H@INSWG] [CPSH AS REQ] | 689 | SGT |
| 1 EA. | STOP | 1270CVPV | 630 | TRM |
| 3 EA. | SILENCER | 1229A/B AS REQ | GR | TRM |

**HW30A** [**EXISTING**/CLASSRM LOCKSET@CONF-OPEN OFFICE-TEACH WORK] EACH SGL TO HAVE:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 3 EA. | HINGE | T4A3786 | 652 | MCK |
| 1 EA. | LOCKSET | 30-10G37LL | 626 | SGT |
| 1 EA. | CYLINDER | 20W20049 | 626 | MED |
| 1 EA. | OVERHEAD STOP/HO | 590H SERIES | 626 | SGT |
| 1 EA. | STOP | 1270CVPV@BAL | 630 | TRM |
| 3 EA. | SILENCER | 1229A/B AS REQ | GR | TRM |

**HW31** [**EXISTING**/PASSAGE SET@KG&NURSE RESTRM-ETC] - EACH SGL TO HAVE:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 3 EA. | HINGE | T4A3786 4.5x4.5 [STA@KG RESTRM] | 652 | MCK |
| 1 EA. | PASSAGE SET | 10U15LL | 626 | SGT |
| 1 EA. | OVERHEAD STOP | 590S SERIES AS REQ | 626 | SGT |
| 1 EA. | STOP | 1270CVPV AS REQ@BAL | 630 | TRM |
| 1 EA. | MOP PLATE | KM050 6x1/2 LDW@NURSE/KG | 630 | TRM |
| 3 EA. | SILENCER | 1229A/B AS REQ | GR | TRM |
| 1 EA. | SIGN | 752/753/754 | BL | TRM |

**HW32** [**EXISTING**/PRIVACY LOCK@STAFF RESTRM] - EACH SGL TO HAVE:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 3 EA. | HINGE | T4A3786 4.5 x 4.5 | 652 | MCK |
| 1 EA. | PRIVACY LOCK | 10U65LL | 626 | SGT |
| 1 EA. | MOP PLATE | KM050 6x1/2 LDW | 630 | TRM |
| 1 EA. | STOP | 1270CVPV | 630 | TRM |
| 1 EA. | COAT HOOK | 3071 [INSTALL@48”FFF] | 626 | TRM |
| 3 EA. | SILENCER | 1229A/B AS REQ | GR | TRM |
| 1 EA. | SIGN | 752/753/754 | BL | TRM |

**HW33** [PIPE CHASE 2050 DRS@STUD RR WHERE OCCURRING] - EACH SGL TO HAVE:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 2 EA. | HINGE | T4A3786 4.5x4.5 NRP [3EA.WHERE REQ] | 652 | MCK |
| 1 EA. | LOCKSET | 8206LNL | 630 | SGT |
| 1 EA. | CYLINDER | 10W0500 | 626 | MED |
| 1 EA. | COLLAR | 861A | 626 | ILC |
| 1 EA. | PULL | 1111C | 630 | TRM |
| 2 EA. | SILENCER | 1229A/B AS REQ | GR | TRM |

**HW33A** [ELEVATED MECH CLASSRM DRS WHERE OCCURRING]

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 3 EA. | HINGE | T4A3786 4.5x4.5 [4x4@1-3/8”] | 652 | MCK |
| 1 EA. | DEADBOLT | 487 | 626 | SGT |
| 1 EA. | CYLINDER | 20W SERIES AS REQ | 626 | MED |

* BALANCE OF HDWE TO BE REUSED.
* VERIFY EXISTING DOOR TEMPLATE FOR LISTED DEADLOCK.

**HW34** MISCELLANEOUS

* ALL HARDWARE BY OVERHEAD DOOR SUPPLIER.

**HW35** [DBL ACTING GATES] - EACH DA GATE TO HAVE:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 1 SET | PIVOT HINGE | 4007MRB | 626 | MCK |

* BALANCE OF HARDWARE BY GATE SUPPLIER.

**HW36** [**INTERIOR**/PUSH-PULLxFLR CLOSER@FMS AUD LOBBY] - EACH PAIR TO HAVE:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 2 EA. | FLR CLOSER | PH27SHOxCOMPLETE | 613 | RIX |
| 2 EA. | INT PIVOT | M19 | 613 | RIX |
| 2 EA. | PULL | 1804-4xPULL ENGRAVING | 613 | TRM |
| 2 EA. | PUSH | 1809xPUSH ENGRAVING | 613 | TRM |
| 2 EA. | KICKPLATE | K0050 10x1 LDW | 613 | TRM |
| 2 EA. | SILENCER | 1229B | GR | TRM |

* CONTRACTOR TO EXTRACT EXISTING FLR CLOSERS AND FIELD VERIFY REQUIRED REPLACEMENT TYPE AND SIZE. CONSULT WITH PROJECT ARCHITECT AS NEEDED.
* CARPET COVER AT SILL TO BE REPLACED AS REQUIRED.
* REFINISH DOORS AND FRAMES.

REFER TO SECTION 1.06 H FOR CLOSE OUT REQUIREMENTS. BELOW IS THE LIST OF EXTRA HARDWARE [EACH PROJECT/SITE] TO BE REVIEWED WITH, AND DELIVERED TO THE DISTRICT LOCK DEPARTMENT SUPERVISOR:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 6 EA. | HINGE | T4A3786 SSF | 652 | MCK |
| 1 EA. | EXIT DEVICE | 16-8804 [VERIFY RAIL SIZE] | 630 | SGT |
| 1 EA. | EXIT DEVICE | 12-8813ETL [VERIFY RAIL SIZE] | 630 | SGT |
| 1 EA. | EXIT DEVICE | 3828-04 FUNCTION | PEN | SGT |
| 1 EA. | LOCKSET | 8204LNL | 626 | SGT |
| 1 EA. | LOCKSET | 8205LNL | 626 | SGT |
| 1 EA. | LOCKSET | 8237LNL | 626 | SGT |
| 1 EA. | LOCKSET | 8250LNLxTICE OOCUP INDx2 EA. EK | 626 | SGT |
| 1 EA. | LOCKSET | 8291LNL | 626 | SGT |
| 1 EA. | PRIVACY | 8265LNLxTICE OCCUP IND. | 626 | SGT |
| 1 EA. | LOCKSET | 30-10G04LL | 626 | SGT |
| 1 EA. | LOCKSET | 30-10G37LL | 626 | SGT |
| 1 EA. | LOCKSET | 30-10G05LL | 626 | SGT |
| 1 EA. | CLOSER | 351-P10 | 689 | SGT |
| 1 EA. | CLOSER | 351-PH10 |  |  |
| 1 EA. | CLOSER | 351-CPSH | 689 | SGT |
| 1 EA. | CLOSER | 351-CPS | 689 | SGT |
| 8 EA. | WALL STOP | 1270CVPV | 630 | MCK |
| 8 EA. | FLOOR STOP | 1214CK | 626 | MCK |
| 1 EA. | PULL | 1096HASP | 630 | TRM |
| 1 EA. | PULL | 1097HASP | 630 | TRM |

# END OF SECTION