1 General

1.01 RELATED SECTIONS

.1 Section 07 92 00 – Joint Sealants.

.2 Section 08 11 00 – Metal Doors and Frames.

.3 Section 08 14 16 – Flush Wood Doors

.4 Section 08 11 16 – Aluminum Doors and Frames

1.02 REFERENCES

.1 Standard hardware location dimensions in accordance with the Canadian Metric Guide for Steel Doors and Frames (Modular Construction) prepared by the Canadian Steel Door and Frame Manufacturer's Association - 2009.

.2 American National Standards Institute (ANSI) / Builders Hardware Manufacturers Association (BHMA).

.1 ANSI/BHMA A156.1-2016, American National Standard for Butts and Hinges.

.2 ANSI/BHMA A156.3-2014, Exit Devices.

.3 ANSI/BHMA A156.4-2016, Door Controls - Closers.

.4 ANSI/BHMA A156.5-2014, Auxiliary Locks and Associated Products.

.5 ANSI/BHMA A156.6-2015, Architectural Door Trim.

.6 ANSI/BHMA A156.7-2016, Standard for Template Hinge Dimensions.

.7 ANSI/BHMA A156.15-2015, Standard for Hardware Preparation in Steel Doors and Steel Frames.

.8 ANSI/BHMA A156.16-2002, Auxiliary Hardware.

.9 ANSI/BHMA A156.16- 2013, Standard for Auxiliary Hardware.

.10 ANSI/BHMA A156.18-2016, Materials and Finishes.

.11 ANSI/BHMA A156.19-2013, Power Assist and Low Energy Power - Operated Doors.

.12 ANSI/BHMA A156.21-2014, Standard for Thresholds.

.13 ANSI/BHMA A156.22-2017, Standard for Door Gasketing Systems.

.14 ANSI/BHMA A156.28-2013, Standard for Keying Systems.

.15 ANSI/BHMA A156.31-2013, Standard for Electrified Strikes and Frame Mounted Actuators.

.3 CSA Group:

.1 CSA B651-12 (R2018). Accessible design for the built environment.

.4 Green Globes Canada.

.1 Green Globes for New Construction. Technical Manual 2015.

.5 Use abbreviations and symbols recommended in "Abbreviations and Symbols as used in Architectural Door and Hardware Schedules and Specifications", 1983, published by the Door and Hardware Institute.

.6 Use vertical hardware schedule format recommended in "Sequence and Format for the Hardware Schedule", 1996, published by the Door and Hardware Institute.

1.03 SUBMITTALS

.1 Provide submittals in accordance with Section 01 33 23 - Shop Drawings Product Data and Samples.

.2 Submit manufacturer's instructions, printed product literature and data sheets for door hardware. Include product characteristics, performance criteria, physical size, finish and limitations.

.3 Submit Product Data in accordance with Green Globes Material Declaration form as contained in the GG Technical Manual.

.1 Submit a product declaration for each hardware item identifying the recycled content for each component.

.4 Submit samples for review and acceptance of each hardware item.

.1 Identify each sample by label indicating applicable specification paragraph number, brand name and number, finish and hardware package number.

.2 After approval samples will be returned for incorporation in Work.

.5 Submit contract hardware list. Indicate specified hardware, including make, model, material, function, size, finish and other pertinent information.

.6 Submit product certificates signed by manufacturer confirming that all components comply with specified performance characteristics and criteria and physical requirements.

.7 Submit manufacturer's installation instructions.

.8 Submit operation and maintenance data for each hardware component.

1.04 DEFINITION

.1 Master Key (MK):

.1 A key which operates all the master keyed locks or cylinders in a group, each lock or cylinder usually operated by its own change key.

.2 To combine a group of locks or cylinders such that each is operated by its own key as well as by a master key for the entire group.

.2 Master Key System:

.1 Any keying arrangement which has two or more levels of keying.

.2 A keying arrangement which has exactly two levels of keying.

.3 Grand Master Key (GMK): The key which operates two or more separate groups of locks each operated by a different master key.

.4 Grand Master Key System: A master key system which has exactly three levels of keying.

1.05 REGULATORY REQUIREMENT

.1 Use cUL, UL or WHI listed and labeled hardware for doors in fire rated partitions and fire exits.

.2 Use only ANSI A156 listed and certified hardware and submit documentation accordingly with Hardware Schedule submission.

.3 Provide hardware for doors in fire separations and exit doors certified by a Canadian Certification Organization accredited by Standards Council of Canada.

1.06 HARDWARE LIST

.1 Submit hardware schedule in accordance with Sections 01 33 23 and 01 78 23.

.2 Submit literature cuts, indicating hardware proposed, including make, model, base material, function, ANSI Function where ANSI used in this specification, Grade, Type, Series, BHMA finish, trim, cUL/WHI listing, UL listing, manufacturer and other pertinent information. Indicate which model or accessory is being provided where more than one model or accessory appears on a page.

1.07 WARRANTY

.1 All hardware and installation must provide warranty against defects and workmanship.

.2 Mechanical Locks and Electronic Access Locks: Warranted in writing by the manufacturer against failure due to defective materials and workmanship for a period of 5 years.

.3 Other Electronic Hardware (Power supplies, EL/LX/RX switches etc.): Warranted for 1 year.

.4 Overhead Door Closers: Warranted in writing by the manufacturer against failure due to defective materials, for a period of 10 years.

1.08 DELIVERY, STORAGE AND HANDLING

.1 Deliver, store and handle materials in accordance with manufacturer's written instructions.

.2 Deliver materials to site in original factory packaging, labelled with manufacturer's name and address.

.3 Package items of hardware including fastenings, separately or in like groups of hardware, label each package as to item definition and location.

.4 Store and protect door hardware from nicks, scratches, and blemishes. Protect prefinished surfaces with wrapping and strippable coating. Replace defective or damaged materials with new.

2 Products

2.01 KEYING, ACCESSORIES AND FINISH

.1 Each lock to be keyed in accordance with the requirements of the Institution.

.1 Keying systems: to ANSI/BHMA-A156.28.

.2 Provide accessories with hardware.

.3 Finish: 626 (satin chrome plated on brass or bronze) unless noted otherwise.

.4 Fasteners: finish to match the exposed surface on which they appear.

.5 Provide temporary construction cylinders for all locks and exit devices.

.6 Final keying: provide Abloy Medeco Cylinders for each lockset. Final keying and installation of cylinders to be by PMT.

.7 Use lock and latch sets with solid metal lever handles meeting requirements of CSA-B651. Accessible Design for the Built Environment, clause 4.1.3.7 Door Hardware and as detailed in the Hardware Schedule, unless specified otherwise.

.8 Provide lever handles of same design style for mortise locksets and exit device trims.

.9 Door prep: to ANSI/BHMA-A156.115 for steel doors and frames and ANSI/BHMA-A156.115-W for wood doors and frames.

2.02 DOOR HARDWARE

.1 General:

.1 Provide hardware as specified in the Hardware Schedule. While manufacturer's catalogue numbers are used in the schedule, it is not the intent that these items are specified exclusively. Manufacturer's numbers are used to denote minimum quality, style design, function and finish. Other manufacture's products may be used providing the items are equivalent in all respects to the items specified. Submit written requests for acceptance of alternate materials.

.2 Provide the following items as specified and without substitution: lock and latch sets, exit devices, power controllers, custom EOL resistors, automatic door operators and glass door hardware.

.3 Provide hardware in compliance with applicable building and fire codes and requirements of local authorities having jurisdiction.

.4 All hardware applied to doors and frames shall be made to template.

.5 Supply hardware complete with all necessary factory provided and approved screws, bolts and other fastening devices of suitable size and type to anchor the hardware in position neatly and properly in accordance with the best practices.

.6 Provide all fastenings to match the hardware with regard to materials and finishes.

.7 Provide hardware for fire rated and labeled door and frame assemblies: CUL and WHI listed or as accepted by authorities having jurisdiction.

.8 Supply and Install all electronic and barrier free hardware including all necessary low voltage cable, terminal strips, connectors, relays and miscellaneous materials to ensure a complete, functioning system, commissioned and interfaced to the access control system.

.2 Butts and hinges: to ANSI/BHMA-A156.1. Grade indicated. Use anti-friction bearing 3-knuckle hinges, one hinge for each 750 mm of door height, button tips, non-rising removable pins unless indicated NRP on hardware schedule. Materials and finishes as detailed:

.1 Interior:

.1 Grade 1: A8111 - heavy weight, steel, 4 bearings.

.2 Grade 2: A8112 - standard weight, steel, 2 bearings.

.3 Grade 3: A8133 - standard weight, steel, plain bearing.

.2 Exterior:

.1 Grade 1: A2111 - heavy weight, bronze, 4 bearings.

.2 Grade 2: A2112 - standard weight, bronze, bearings.

.3 Grade 3: A2133 - standard weight, bronze, plain bearing.

.3 Manufacturer: Stanley, Hager, Ives

.3 Door Closers and Accessories: to ANSI/BHMA-A156.4, Grade 1, surface and concealed closers, cast iron bodies, modern type with metal cover, sprayed enamel finish, metallic 689 aluminum, size to suit door width and mass, with arms as indicated.

.1 Where closer finish is specified, provide closer arms, brackets and covers factory plated in same finish. Heavy-duty spring assisted shock-absorber arm as indicated.

.2 Test closers to 10,000,000 cycles without failure.

.3 Disabled access doors: to operate at a minimum pressure not exceeding 38 N for exterior doors, 22 N for interior doors and close in not less than 5 seconds from an open position of 90 degrees.

.4 Provide all closers field reversible and multi-size 1-6 (PT4H) adjustable.

.5 Covers: for surface closers, provide full cover metal.

.6 Concealed-in-door closers with concealed tracks in frame to be manufactured to fit in 45 mm thick doors without the use of surface reinforcement plates.

.7 Overhead concealed closers to fit in 45 mm or 102 mm headers as detailed in the Hardware Schedule.

.8 Provide all closers other than auto operators from one manufacturer.

.9 Manufacturer: LCN, DormaKaba, Sargent, Corbin Russwin.

.4 Automatic Door Operators: ANSI/BHMA-156-19 Standards for Power Assisted and Low Energy Power Operated Doors. Electro-mechanical, non-handed operator, powered by 24 volts, 1/8 hp motor. Spring shall be adjustable to compensate for different manual push forces required on varying door widths.

.1 Automatic Operator capable of operating and controlling 91 kg door, 1219 mm in width.

.2 Surface Mounted Operator:

.1 Operator Housing to be high extruded aluminum with removable cover.

.2 Connecting hardware to have high steel arm from the operator, mounted to the top face of the swinging door.

.3 UL listed R-9469 Fire Door with Automatic Closer.

.3 Operator Temperature Range: Capable of operating within temperature ranges from -29°C and 71°C.

.4 Electrical Characteristic: Normal current draw at .625 amps at 120 VAC, complete with built-in thermal overload protection.

.5 Battery Mode: Operator to maintain continuous operation by battery power during power failure. Continuous monitored and provides a warning signal if the battery power is not working properly.

.6 Cycle Counter: Battery powered, 7 digit LCD cycle counter with a reset feature to track door usage cycles.

.7 Electrical Damping: Operator to include standard electric dampening system which automatically counteracts additional force applied to door during the opening or closing cycle by reducing door speed.

.8 Stack Pressure Compensation: Electronic control allows for increases of forces to overcome minor stack pressures while compensating to lower manual push forces when door is used in manual mode, complying with ANSI/BMHA A156.19.

.9 Obstruction Control: Operator will stop and reverse the door movement.

.5 Locks and latches (mortised): to ANSI/BHMA-A156.13. Series 1000, Operational Grade 1, Security Grade 1. Tested to 1 million cycles minimum, with anti-friction latch bolt, and functions indicated. Manufacturer: Schlage, Best, Corbin Russwin.

.1 Provide mortise locks and deadlocks from same manufacturer. No other manufacturers will be considered for use on this project.

.2 Provide lever designs and finishes as detailed in Hardware Schedule.

.3 Provide Lock DEUxIDH and WEUxIDH function electronic locks (where specified) with the LS (latchbolt status) option feature built in at the manufacturer's factory.

.6 Dead Lock (mortised): to ANSI/BHMA-A156.5. Function E06071, E06072, dead lock by key outside and turn piece inside.

.7 Exit Device: to ANSI/BHMA-A156.3. Grade 1, tested to 1 million cycles minimum, flat push pad type design with removable cover plates concealing mechanism and fasteners.

.1 Mechanism case with minimum average wall thickness of 3.5 mm. All internal parts zinc Dichromate to resist corrosion.

.2 Internal springs: compression type.

.3 Provide all exit devices for wood, hollow metal to be by one manufacturer.

.4 Provide all concealed vertical rod devices as "cable" type, not rod type.

.5 Finishes: as detailed in Hardware Schedule.

.6 Manufacturer: Von Duprin, Dormakaba, Sargent, Schlage.

.8 Exit Device Trim: to ANSI/BHMA-A156.6. Lever style to match mortise lock trim with functions noted. Finish: as detailed in Hardware Schedule.

.1 Manufacturer: Von Duprin, Dormakaba, Sargent, Schlage.

.9 Normal Strikes: box type, 6 mm lip projection beyond jamb ASA dimensions.

.1 Manufacturer as lockset/exit device.

.10 Electric Strikes:

.1 To ANSI/BHMA-A156.5 and ANSI/BHMA-A156.31. Grade 1, fail secure unless detailed otherwise. UL10B rated for fire. 4.8 mm horizontal adjustment capability, dual monitor switches, silent operation, dual voltage. E59321 - Mortised: for use with mortise locks not having dead bolts, use also with mortise exit devices. E59311- Surface: for use with rim exit devices.

.2 Finishes as detailed in Hardware Schedule.

.3 Manufacturer: Von Duprin, HES, Best

.11 Power Transfer:

.1 Non-load bearing, concealed in both door and frame when door closed. CUL listed for Fire, Burglary Protection and Class 1 low voltage installation. Rated for and compatible with power supply and electric devices.

.2 Provide units complete with ten 0.511 mm diameter wires. 24 VDC. 1 ampere rated.

.3 Finish: SP28 (silver) or as specified in Hardware Schedule.

.4 Manufacturer: Von Durpin, Securitron, Hager.

.12 Door Pull:

.1 To ANSI/BHMA-A156.6. Type J401 straight. Sizes, oval designs, diameters, and mounting.

.2 Finish as detailed in Hardware Schedule.

.3 Manufacturer: Ives, Standard Metal, Rockwood, Kawneer.

.13 Push Plate:

.1 To ANSI/BHMA-A156.6. Type J301 rectangular, square 90 degree corners, beveled edges. Size 127 mm wide x 610 mm high x 0.50 mm thick. 3M tape mounted.

.2 Finish: as detailed in Hardware Schedule.

.3 Manufacturer: Ives, Standard Metals, Rockwood.

.14 Kick Plate, Mop Plate and Armor Plate:

.1 To ANSI/BHMA-A156.6. J103, J102, and J101. Size 152 mm, 203 mm or 800 mm high x door width x 0.50 mm thick. 4 beveled edges. 3M tape mounted. Armor plates to bear cUL/WHI stamp on rated doors.

.2 Finish: as detailed in Hardware Schedule.

.3 Manufacturer: Ives, Standard Metals, Rockwood.

.15 Wall Door Stop:

.1 To ANSI/BHMA-A156.16. Cast brass/bronze type L02101. Overall projection 89 mm. Attach with surface screws.

.2 Finish: as detailed in Hardware Schedule.

.3 Manufacturer: Ives, Gallery Speciality Hardware, Rockwood. CBH

.16 Floor Door Stop:

.1 To ANSI/BHMA-A156.16. Cast brass/bronze combination high/low dome type. Cushion secured by concealed fasteners. Anti-rotation stud, for doors with or without threshold.

.2 Finish: as detailed in Hardware Schedule.

.3 Manufacturer: Ives, Gallery Speciality Hardware, Rockwood. CBH

.17 Door Holder:

.1 To ANSI/BHMA-A156.16. Cast brass/bronze. Type L01301, hold-open and release by push and pull on door, surface mounted.

.2 Finish: as detailed in Hardware Schedule.

.3 Manufacturer: Glynn-Johnson, Rockwood, Hager.

.18 Door Coordinator:

.1 To ANSI/BHMA-A156.3 Type Type 21 (Grade 1), Type 21A (Grade1), Type 21B (Grade2)

.2 UL/cUL Fire Rated for 3 hours Fire Rated Door Hardware, conforms to UL10C.

.3 Compatible with flush bolts, door closers, astragals and double doors hardware.

.4 Provide quiet and efficient operations, protect the door from damage during operation.

.5 Manufacturer: Trimco, Ives Hinges, Rockwood, Don Jo.

.19 Lever Extension Flush Bolt: to ANSI/BHMA-A156.16. Cast brass/bronze. Type L14251 fire rated, 305 or 610 mm long rod. 19 mm backset, mortised keeper. Finish: as detailed in Hardware Schedule.

.20 Threshold: to ANSI/BHMA-A156.21. Types, sizes, function and finishes as detailed in Hardware Schedule.

.1 Manufacturer: KN Crowder, Pemko, Zero.

.21 Meeting Stile Weather Strip:

.1 To ANSI/BHMA-A156.22. Surface applied, two-part adjustable surface astragal. ULC rated in fire separations.

.2 Types, sizes, functions and finishes as detailed in Hardware Schedule.

.3 Manufacturer: KN Crowder, Pemko, Zero

.22 Smoke/Sound Seal Gasketing: to ANSI/BHMA-A156.22. Function ROE194, silicone tube, self-adhesive. Tested to ASTM E283. cUL 1-1/2 hours.

.1 Manufacturer: KN Crowder, Pemko, Zero.

.23 Door Sweep:

.1 To ANSI/BHMA-A156.22. Densely compressed nylon filaments encased in clear and bronze anodized aluminum retainer, for surface mounting on the door. Listed and labeled for use in 90 minute fire doors in accordance with CAN/ULC-S104. Function R3A436 and R3A536.

.2 Sizes and finishes as indicated in Hardware Schedule.

.3 Manufacturer: KN Crowder, Pemko, Zero.

.24 Weatherstripping:

.1 To ANSI/BHMA-A156.22. Non-rigid, silicone bulb in solid aluminum strip at head and jamb, suitable for hardware application on top of it. Listed and labeled for use in 90 minute fire doors, in accordance with CAN/ULCS104-10. Function R1E155, R3E165, R3E265.

.2 Sizes and finishes as indicated in to Hardware Schedule.

.3 Manufacturer: KN Crowder, Pemko, Zero

.25 Astragal: To ANSI/BHMA-A156.22. Function types, sizes and finishes as detailed in Hardware Schedule.

.1 Manufacturer: KN Crowder, Pemko, Zero.

.26 Power supply for exit device:

.1 cULC/WHI approved. Rated for and compatible with Electric Latch Retraction Exit Devices and Magnetic Locks. Complete with minimum 5AH battery back-up and Fire Alarm interface connection.

.2 Same manufacturer as the exit devices.

.3 Manufacturer: Schlage Electronics, Securitron, RCI.

.27 All locks, exit devices, removable mullions, key switches. Capable of accepting Abloy cylinders with cam to suit.

.1 Supply temporary construction cylinders complete with 20 keys total for locks and exit devices.

.2 Construction cylinders will be replaced by PMT at project completion.

.28 Miscellaneous Accessories: provide all items not specifically described but required for a complete installation of finish hardware. Include accessories as indicated in Hardware Schedule.

2.03 FASTENINGS

.1 Use only fasteners provided by manufacturer. Failure to comply may void warranties and applicable licensed labels.

.2 Supply screws, bolts, expansion shields and other fastening devices required for satisfactory installation and operation of hardware.

.3 Exposed fastening devices to match finish of hardware.

.4 Where pull is scheduled on one side of door and push plate on other side, supply fastening devices, and install so pull can be secured through door from reverse side. Install push plate to cover fasteners.

.5 Use fasteners compatible with material through which they pass.

2.04 HARDWARE SCHEDULE

.1 Hardware specified in hardware Schedule to take precedence over specifications.

3 Execution

3.01 INSTALLATION

.1 Comply with manufacturer's written recommendations, including product technical bulletins, product catalogue installation instructions, product carton installation instructions, and data sheets.

.2 Supply metal door and frame manufacturers with complete instructions and templates for preparation of their work to receive hardware.

.3 Supply manufacturers' instructions for proper installation of each hardware component.

.4 Install hardware to standard hardware location dimensions in accordance with CSDFMA Canadian Metric Guide for Steel Doors and Frames (Modular Construction).

.5 Where door stop contacts door pulls, mount stop to strike bottom of pull.

.6 Install key control cabinet.

.7 Use only manufacturer's supplied fasteners. Use of "quick" type fasteners, unless specifically supplied by manufacturer, is unacceptable.

3.02 ADJUSTING

.1 Adjust door hardware, operators, closures and controls for optimum, smooth operating condition, safety and for weather tight closure.

.2 Lubricate hardware, operating equipment, and other moving parts.

.3 Adjust door hardware to ensure tight fit at contact points with frames.

3.03 CLEANING

.1 Leave Work area clean at end of each day.

.2 Clean hardware with damp rag and approved non-abrasive cleaner, and polish hardware in accordance with manufacturer's instructions.

.3 Remove protective material from hardware items where present.

3.04 DEMONSTRATION

.1 Brief maintenance staff regarding proper care, cleaning, and general maintenance of projects complete hardware. Demonstrate use, handling, and storage of keys.

.2 Demonstrate application and storage of wrenches for door closers locksets and fire exit hardware.

.3 Demonstrate operation, operating components, adjustment features, and lubrication requirements.

3.05 PROTECTION

.1 Protect installed products and components from damage during construction.

.2 Repair damage to adjacent materials caused by door hardware installation.

3.06 HARDWARE SCHEDULE

Heading #01

3	Standard Hinge	NRP-3CB1 Size to Suit	630
1	Panic Hardware	98 EO	626
1	Surface Closer	4040XP EDA X ST-1944 – (Push Side Mount)	689
1	Concealed O/H Stop	104S (Set for 90 Deg)	630
1	Kick Plate	CDH 92A 203 x Size to Suit x TM	630
1	Mop Plate	CDH 92A 203 x Size to Suit x TM	630
1	Threshold	CT-46 x Opening Width	627
1	Drip Cap	W-3 x Opening Width (paint finish to match door frame finish)	CA
1	Weather-stripping	W20S 1@ HD Width/2@JMB Height (Install Prior to Mounting Soffit HDWRE)	628
1	Door Sweep	W-35-1 x Opening Width	628

Heading #02

6	Standard Hinge	NRP-3CB1 Size to Suit	630
1	Flush Bolt	Constant Flush Bolt – FB51P	630
1	Storeroom Lockset	L9080P 07B	626
1	Mortised Cylinder Housing	32-0275 x Cam to Suit	619
1	Construction Core	32-0275 CC	619
1	Permanent Core	32T-0201-M3 GMK	619
2	Surface Closer	4040XP EDA X ST-1944 – (Push Side Mount)	689
1	Door Coordinator	3092 Black	622
2	Concealed O/H Stop	104S (Set for 90 Deg)	630
1	Astragal	Astragal – By Door Supplier	630
2	Kick Plate	CDH 92A 203 x Size to Suit x TM	630
2	Mop Plate	CDH 92A 203 x Size to Suit x TM	630
1	Threshold	CT-46 x Opening Width	627
1	Drip Cap	W-3 x Opening Width (paint finish to match door frame finish)	CA
1	Weather-stripping	W20S @ HD Width x JMB Height (Install Prior to Mounting Soffit HDWRE)	CA
1	Door Sweep	W-35-1 x Opening Width	CA
2	Door Silencer	SR64	GRY

HG03

3	Standard Hinge	NRP-3CB1 Size to Suit	630
1	Storeroom Lockset	L9080P 07B	626
1	Mortised Cylinder Housing	32-0275 x Cam to Suit	619
1	Construction Core	32-0275 CC	619
1	Permanent Core	32T-0201-M3 GMK	619
1	Surface Closer	4040XP REG AL MC – (Push Side Mount)	689
1	Concealed O/H Stop	104S (Set for 90 Deg)	628
1	Kick Plate	CDH 92A 203 x Size to Suit x TM	630
1	Mop Plate	CDH 92A 101 x Size to Suit x TM	630
3	Door Silencer	SR64	GRY

Heading #04

3	Heavy Weight Hinge	NRP-3CB1HW Size to Suit	630
1	Panic Hardware	98 EO	626
1	Surface Closer	4040XP-3049EDA X ST-1944 – (Push Side Mount)	689
1	Concealed O/H Stop	104S (Set for 90 Deg)	630
1	Kick Plate	CDH 92A 203 x Size to Suit x TM	630
1	Mop Plate	CDH 92A 203 x Size to Suit x TM	630
1	Threshold	CT-46 x Opening Width	627
1	Drip Cap	W-3 x Opening Width (paint finish to match door frame finish)	CA
1	Weather-stripping	W20S 1@ HD Width/2@JMB Height (Install Prior to Mounting Soffit HDWRE)	628
1	Door Sweep	W-35-1 x Opening Width	628

HG05

3	Heavy Weight Hinge	NRP-3CB1HW Size to Suit	630
1	Surface Closer	4040XP REG AL MC – (Push Side Mount)	689
1	Door Pull	9264F-18-12	630
1	Concealed O/H Stop	104S (Set for 90 Deg)	630
1	Wall Stop	CDH 253	626
1	Kick Plate	CDH 92A 203 x Size to Suit x TM	630
1	Mop Plate	CDH 92A 101 x Size to Suit x TM	630
1	Push Plate	CDH 93A-T (101 x 610) x B4E x TM	630
3	Door Silencer	SR64	GRY

HG06

3	Heavy Weight Hinge	NRP-3CB1HW Size to Suit	630
1	Storeroom Lockset	L9080P 07B	626
1	Mortised Cylinder Housing	32-0275 x Cam to Suit	619
1	Construction Core	32-0275 CC	619
1	Permanent Core	32T-0201-M3 GMK	619
1	Electric Strike	6210 FS 24VDC	630
1	Auto Operator	HA9-SP PULL SIDE 1/4HP 115VAC RH	AL
1	WR Relay Kit	CM-CX-WC16	
1	WR Emerg. Call Kit	CM-CX-WEC10EF	
1	LED Annunciator	CM-AF500EF (Occupied when Lit) (Locate inside WR beside ‘Wave to Lock’ button)	
1	Wall Stop	CDH 253	626
1	Kick Plate	CDH 92A 203 x Size to Suit x TM	630
1	Mop Plate	CDH 92A 101 x Size to Suit x TM	630
3	Door Silencer	SR64	GRY

HG07

3	Standard Hinge	NRP-3CB1 Size to Suit	626
1	Privacy Lockset	L9440 07B	626
1	Surface Closer	4040XP REG AL MC – (Pull Side Mount)	689
1	Concealed O/H Stop	104S (Set for 90 Deg)	630
1	Wall Stop	CDH 253	626
1	Kick Plate	CDH 92A 203 x Size to Suit x TM	630
1	Mop Plate	CDA 92A 101 x Size to Suit x TM	630
3	Door Silencer	SR64	GRY

HG08

3	Standard Hinge	NRP-3CB1 Size to Suit	630
1	Rim Cylinder Housing	32-0475V x Cam to Suit	619
1	Construction Core	32-0201 CC	619
1	Permanent Core	32T-0201-M3 GMK	619
1	Exit Device	9850WDC NL-OP x Rim Cylinder x Offset D-Pull - LBL 4’	626
1	Offset Door Pull	8190EZHD-0 – STD	630
1	Surface Closer	4040XP EDA X ST-1944 – (Push Side Mount)	689
1	Concealed O/H Stop	104S (Set for 90 Deg)	630
1	Kick Plate	CDH 92A 203 x Size to Suit x TM	630
1	Mop Plate	CDH 92A 203 x Size to Suit x TM	630
1	Threshold	CT-46 x Opening Width	627
1	Drip Cap	W-3 x Opening Width (paint finish to match door frame finish)	CA
1	Weather-stripping	W20S 1@ HD Width/2@JMB Height (Install Prior to Mounting Soffit HDWRE)	628
1	Door Sweep	W-35-1 x Opening Width	628

HG09

2	Continuous Hinge	SL11 CL HD x Door Height	628
1	Flush Bolt	Constant Flush Bolt – FB51P	630
1	Lock	4911W-35-02	628
1	Paddle Operator	4591-01-02	628
1	Rim Cylinder Housing	32-0475V x Cam to Suit	619
1	Construction Core	32-0201 CC	619
1	Permanent Core	32T-0201-M3 GMK	619
2	Surface Closer	4040XP EDA x ST-1944	689
2	Concealed O/H Stop	104S (Set for 90 Deg)	628
1	Astragal -Full Height	Astragal – By Door Supplier (match door finish)	
1	Threshold	CT-46 x Opening Width	627
1	Weather-stripping	Weather-stripping - By Door Supplier	
2	Door Sweep	Door Sweep - By Door Supplier	628

HG10

3	Standard Hinge	NRP-3CB1 Size to Suit	626
1	Privacy Lockset	L9440 07B	626
1	Surface Closer	4040XP REG AL MC – (Pull Side Mount)	689
1	Wall Stop	CDH 253	626
1	Kick Plate	CDH 92A 203 x Size to Suit x TM	630
1	Mop Plate	CDA 92A 101 x Size to Suit x TM	630
3	Door Silencer	SR64	GRY

HG11

3	Standard Hinge	NRP-3CB1 Size to Suit	626
1	Office Lockset	L9050P 07B	626
1	Mortised Cylinder Housing	32-0275 x Cam to Suit	619
1	Construction Core	32-0201 CC	619
1	Permanent Core	32T-0201-M3 GMK	619
1	Surface Closer	4040XP REG AL MC – (Pull Side Mount)	689
1	Wall Stop	CDH 253	626
1	Kick Plate	CDH 92A 203 x Size to Suit x TM	630
1	Mop Plate	CDH 92A 101 x Size to Suit x TM	630

HG12

3	Standard Hinge	NRP-3CB1 Size to Suit	652
1	Storeroom Lockset	L9080 07B	626
1	Surface Closer	4040XP REG AL MC – (Pull Side Mount)	689
1	Wall Stop	CDH 253	626
1	Kick Plate	CDH 92A 203 x Size to Suit x TM	630
1	Mop Plate	CDH 92A 101 x Size to Suit x TM	630
3	Door Silencer	SR64	GRY

END OF SECTION