

**Part 1            General**

**1.1                RELATED REQUIREMENTS**

- .1      Section 01 33 00 - Submittal Procedures.
- .2      Section 01 45 00 - Quality Control.
- .3      Section 01 78 00 - Closeout Submittals.

**1.2                REFERENCES**

- .1      American National Standards Institute (ANSI) / Builders Hardware Manufacturers Association (BHMA)
  - .1      ANSI/BHMA A156.1-2006, American National Standard for Butts and Hinges.
  - .2      ANSI/BHMA A156.2-2011, Bored and Preassembled Locks and Latches.
  - .3      ANSI/BHMA A156.4-2013, Door Controls - Closers.
  - .4      ANSI/BHMA A156.6-2010, Architectural Door Trim.
  - .5      ANSI/BHMA A156.8-2010, Door Controls - Overhead Stops and Holders.
  - .6      ANSI/BHMA A156.13-2012, Mortise Locks and Latches Series 1000.
  - .7      ANSI/BHMA A156.18-2012, Materials and Finishes.
- .2      Canadian Steel Door and Frame Manufacturers' Association (CSDMA)
  - .1      CSDMA Recommended Dimensional Standards for Commercial Steel Doors and Frames - 2009.

**1.3                ACTION AND INFORMATIONAL SUBMITTALS**

- .1      Submit in accordance with Section 01 33 00 - Submittal Procedures.
- .2      Product Data:
  - .1      Submit manufacturer's instructions, printed product literature and data sheets for door hardware and include product characteristics, performance criteria, physical size, finish and limitations.
- .3      Hardware List:
  - .1      Submit contract hardware list.
  - .2      Indicate specified hardware, including make, model, material, function, size, finish and other pertinent information.
- .4      Test Reports: certified test reports showing compliance with specified performance characteristics and physical properties.
- .5      Manufacturer's Instructions: submit manufacturer's installation instructions.

**1.4                CLOSEOUT SUBMITTALS**

- .1      Submit in accordance with Section 01 78 00 - Closeout Submittals.
- .2      Operation and Maintenance Data: submit operation and maintenance data for door hardware for incorporation into manual.

## **1.5 MAINTENANCE MATERIALS SUBMITTALS**

- .1 Extra Stock Materials:
  - .1 Supply maintenance materials in accordance with Section 01 78 00 - Closeout Submittals.
  - .2 Tools:
    - .1 Supply 2 sets of wrenches for door closers and locksets.

## **1.6 QUALITY ASSURANCE**

- .1 Regulatory Requirements:
  - .1 Hardware for doors in fire separations and exit doors certified by a Canadian Certification Organization accredited by Standards Council of Canada.
- .2 Certificates: product certificates signed by manufacturer certifying materials comply with specified performance characteristics and criteria and physical requirements.

## **1.7 DELIVERY, STORAGE AND HANDLING**

- .1 Deliver, store and handle materials in accordance with Section 01 61 00 - Common Product Requirements and with manufacturer's written instructions.
- .2 Delivery and Acceptance Requirements: 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 Storage and Handling Requirements:
  - .1 Store materials off ground, indoors in dry location and in accordance with manufacturer's recommendations in clean, dry, well-ventilated area.
  - .2 Store and protect door hardware from nicks, scratches, and blemishes.
  - .3 Protect prefinished surfaces with strippable coating.
  - .4 Replace defective or damaged materials with new.

## **Part 2 Products**

### **2.1 HARDWARE ITEMS**

- .1 Use one manufacturer's products only for similar items.

### **2.2 DOOR HARDWARE**

- .1 As per drawings, Hardware groups and Door Schedule.
- .2 Door Closers and Accessories:
  - .1 Door controls (closers): to ANSI/BHMA A156.4, listed in Hardware Schedule, size in accordance with ANSI/BHMA A156.4, table A1, finish as indicated.
  - .2 Door controls - overhead holders: to ANSI/BHMA A156.8, listed in Hardware Schedule, finish as indicated.
  - .3 Closer/holder release devices: to ANSI/BHMA A156.15, listed in hardware schedule, finish as indicated.

- .3 Door Operators:
  - .1 Power-operated pedestrian doors: to ANSI/BHMA A156.10.
  - .2 Power assist and low energy power operated doors: to ANSI/BHMA A156.19.

### **2.3 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 Use fasteners compatible with material through which they pass.

### **2.4 KEYING**

- .1 Prepare keying schedule in conjunction with Departmental Representative.
- .2 Supply construction locks.
- .3 Permanent cores and keys to be by Departmental Representative.

## **Part 3 Execution**

### **3.1 INSTALLATION**

- .1 Manufacturer's Instructions: 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 Use only manufacturer's supplied fasteners.
  - .1 Use of "quick" type fasteners, unless specifically supplied by manufacturer, is unacceptable.
- .6 Remove construction locks when directed by Departmental Representative.
  - .1 Install permanent cores and ensure locks operate correctly.

### **3.2 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.

### **3.3 CLEANING**

- .1 Progress Cleaning: clean in accordance with Section 01 74 11 - 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.
- .4 Final Cleaning: upon completion remove surplus materials, rubbish, tools and equipment in accordance with Section 01 74 11 - Cleaning.

**3.4 DEMONSTRATION**

- .1 Demonstrate operation, operating components, adjustment features, and lubrication requirements.

**3.5 PROTECTION**

- .1 Protect installed products and components from damage during construction.
- .2 Repair damage to adjacent materials caused by door hardware installation.

**3.6 SCHEDULE**

**Group: 1**

1 Opening: D102, D014, D015

| Qty (Active) | Description           | Catalog             | Product Code       | Finish (BHMA) | Finish (ANSI) | Remarks |
|--------------|-----------------------|---------------------|--------------------|---------------|---------------|---------|
| 1            | Top Jamb Mount Closer | LCN (CAD)           | 9542 REG AL {Hand} |               | CAL           |         |
| 2            | Actuator, Wall Mount  | LCN (CAD)           | 8310-3856WS AL     |               | CAL           |         |
| 1            | Receiver              | LCN (CAD)           | 8310-865 AL        |               | CAL           |         |
| 1            | Stop Only             | Glynn-Johnson (CAD) | 104S C32D          |               | C32D          |         |

**Group: 2**

1 Opening: D107

| Qty (Active) | Description       | Catalog       | Product Code | Finish (BHMA) | Finish (ANSI) | Remarks |
|--------------|-------------------|---------------|--------------|---------------|---------------|---------|
| 1            | Deadbolt Function | Schlage (CAD) | B560         |               | 626           |         |

**END OF SECTION**

**DOOR SCHEDULE**

| N/E NO. | LOCATION        | DOOR     |       | FRAME |      |      |      |       |      |      |      | ULC    |       | HDWE GROUP | NOTES |
|---------|-----------------|----------|-------|-------|------|------|------|-------|------|------|------|--------|-------|------------|-------|
|         |                 | NOM.SIZE | TYPE  | MAT.  | CORE | FIN. | GLS. | TYPE  | MAT. | FIN. | GLS. | RATING | GROUP |            |       |
| D102    | WASHROOM 102    | EX       | HM-EX | EX    | EX   | PT   | -    | WM-EX | EX   | PT   | -    | -      | 1     | 1,2        |       |
| D104    | WASHROOM 104    | EX       | HM-EX | EX    | EX   | PT   | -    | WM-EX | EX   | PT   | -    | -      | 1     | 1,2        |       |
| D105    | UNIV. WASH. 105 | EX       | HM-EX | EX    | EX   | PT   | -    | WM-EX | EX   | PT   | -    | -      | 1     | 1,2        |       |
| D106    | MECH RM 106     | EX       | HM-EX | EX    | EX   | PT   | -    | WM-EX | EX   | PT   | -    | 45min  | -     | 1          |       |
| D107    | STORAGE 107     | EX       | HM-EX | EX    | EX   | PT   | -    | WM-EX | EX   | PT   | -    | -      | 2     | 1,3        |       |
| D108    | STAFF ROOM 108  | EX       | HM-EX | EX    | EX   | PT   | -    | WM-EX | EX   | PT   | -    | -      | -     | 1          |       |
|         |                 |          |       |       |      |      |      |       |      |      |      |        |       |            |       |
|         |                 |          |       |       |      |      |      |       |      |      |      |        |       |            |       |

**NOTES**

- 1 Re-paint existing door and frame. Refer to 2/A05 for colour.
- 2 Provide new auto-door operator in existing door. Prepare door and frame as required.
- 3 Prepare door and frame for new deadbolt as required.

**GENERAL NOTES**

- 1 Prepare and provide new paint finish for all existing pressed steel frames.
- 2 General Contractor to ensure all existing door hardware being re-used is in proper working order and free of damage.
- 3 General Contractor to install construction cylinders/keyways during construction. Final cylinders/keyways by Departmental Representative.

**LEGEND**

- EX Existing
- HM Hollow Metal
- HM-EX Hollow Metal, Existing
- PT Paint
- ST Steel
- WM-EX Welded steel frame, Existing