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| Version | Date | Description of Revisions |
| 1 | August 30, 2006 | Approved final document. |
| 2 | November 13, 2009 | Modified ‘Related Section’ |
| 3 | March 15, 2011 | Minor changes from Legal |
| 4 | April 18. 2011 | Spellcheck |
| 5 | June 12, 2012 | Addition of References and Replacement Parts sections on this page |
| 6 | July 9, 2012 | Reformatted to Reduce White Space |
| 7 | April 23, 2015 | General formatting |
| 8 | September 15, 2015 | First review Phase 1 update (AV) |
| **9** | **December 14, 2015** | **Updated, Finalized Specification – Legal Reference eDOCS #6295420 v3 (AV)** |
| 10 | June 13, 2016 | Phase 2 update, incorporation of PS Division 08 71 60 – Door Hardware into specification detailing high security lock system to be employed at all facilities. (AV) |

NOTE:

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**The on-line copy is the current version of the document.**

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## Related Sections

### *[Under "Related Sections", identify other Sections that are related to, and/or dependent on, the work results or information specified elsewhere. The list should be limited to Sections with specific information that the reader might expect to find in this Section, but is specified elsewhere. For example, if hardware for aluminum entrances is specified in the aluminum entrance Section, a cross-reference would be appropriate in the finish hardware Section. The purpose of this cross-referencing is for information only, to aid in finding those other requirements—not to define the scope of the Section.*

### *Cross-referencing here may also be used to coordinate assemblies or systems whose components may span multiple Sections and which must meet certain performance requirements as an assembly or system.*

### *Contractor is responsible for coordination of the Work.*

### *This Section is to be completed/updated during the design development by the Consultant. If it is not applicable to the section for the specific project it may be deleted.]*

### *[List Sections specifying installation of products supplied but not installed under this Section and indicate specific items.]*

### Section [\_\_\_\_\_\_ – \_\_\_\_\_\_\_\_\_\_\_\_]: Execution requirements for ...[item]... specified under this Section.

### *[List Sections specifying products installed but not supplied under this Section and indicate specific items.]*

### Section [\_\_\_\_\_\_ – \_\_\_\_\_\_\_\_\_\_\_\_]: Product requirements for ...[item]... for installation under this Section.

### *[List Sections specifying related requirements.]*

### Section [\_\_\_\_\_\_ – \_\_\_\_\_\_\_\_\_\_\_\_]: [Optional short phrase indicating relationship].

### Section 01300 - Submittals

### Section 01600 – Material and Equipment

### York Region Property Services Branch, Buildings & Facilities Design Standards and Guidelines:

#### Division 08 71 60 – Door Hardware

#### Division 28 00 00.01 – Security System Facility Design Guideline

#### Division 28 00 00.02 – Security System Specification

## References

*[Delete .1 if Section 01060 – Regulatory Requirements is included in Contract Documents.]*

### Comply with the latest edition of the following statutes, codes, standards, and all amendments thereto:

#### Canadian Steel Door and Frame Manufacturers’ Association (CSDFMA).

##### CSDFMA Canadian Metric Guide for Steel Doors and Frames (Modular Construction): Standard hardware location dimensions *[Consultant to amend to latest appropriate guide].*

#### Builders Hardware Manufacturer’s Association (BHMA):

##### ANSI/BHMA A156.2-2011, Bored and Preassembled Locks and Latches.

##### ANSI/BHMA A156.1-2013, Butts and Hinges.

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

##### ANSI/BHMA A156.4-2013, Door Controls -Closers.

##### ANSI/BHMA A156.5-2014, Cylinders and Input Devices for Locks.

##### ANSI/BHMA A156.6-2010, Architectural Door Trim.

##### ANSI/BHMA A156.8-2010, Door Controls - Overhead Stops and Holders.

##### ANSI/BHMA A156.10-2011, Power Operated Pedestrian Doors.

##### ANSI/BHMA A156.12-2013, Interconnected Locks.

##### ANSI/BHMA A156.13-2012, Mortise Locks and Latches.

##### ANSI/BHMA A156.14-2013, Sliding and Folding Door Hardware.

##### ANSI/BHMA A156.15-2011, American National Standard for Release Devices – Closer Holder, Electromagnetic and Electromechanical.

##### ANSI/BHMA A156.16-2013, Auxiliary Hardware.

##### ANSI/BHMA A156.17-2014, Self Closing Hinges and Pivots.

##### ANSI/BHMA A156.18-2012, Materials and Finishes.

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

##### ANSI/BHMA A156.20-2006 (R2012), Strap and Tee Hinges, and Hasps.

## Regulatory Requirements

### All hardware for doors in fire separations and exit doors must be certified by a Canadian Certification Organization accredited by Standards Council of Canada.

## Submittals

### Product Data:

#### Submit manufacturer's printed product literature, specifications and data sheet in accordance with Section 01300 - Submittals.

### Samples:

#### Submit samples in accordance with Section 01300 - Submittals.

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

#### After approval samples will be returned for incorporation in the Work.

### Hardware List:

#### Submit contract hardware list in accordance with Section 01300 – Submittals.

#### Indicate specified hardware, including make, model, material, function, size, finish and other pertinent information.

### Manufacturer's Instructions:

#### Submit the manufacturer's installation instructions.

### Closeout Submittals:

#### Provide operation and maintenance data for door closers, locksets, door holders [electrified hardware] [\_\_\_] and fire exit hardware.

## Quality Assurance

### Test Reports: certified test reports showing compliance with specified performance characteristics and physical properties.

### Certificates: product certificates signed by the manufacturer certifying materials comply with specified performance characteristics and criteria and physical requirements.

### Pre-installation Meetings: conduct pre-installation meetings to verify project requirements, manufacturer's installation instructions and the manufacturer's warranty requirements. Comply with the requirements of Division 1 – General Requirements.

## Maintenance

### Extra Materials:

#### Provide maintenance materials and data.

#### Supply two sets of wrenches for [door closers] [locksets] [and fire exit hardware].

## Delivery, Storage, and Handling

### Packing, Shipping, Handling and Unloading:

#### Deliver, store, handle and protect materials in accordance with Section 01600 – Material and Equipment.

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

### Storage and Protection:

#### Store finishing hardware in locked, clean, and dry area.

## Measurement and Payment

*[Choose one of the following payment language provisions that best suits the individual project.*

*If this Section is not specifically referenced by an item in the Bid Form, please use the following language:*

### The work of this Section will not be measured separately for payment. All costs associated with the work of this Section shall be included in the Contract Price.

*OR If this Section is specifically referenced in the Bid Form, use the following language and identify the relevant item in the Bid Form:*

### All costs associated with the work of this Section shall be included in the price(s) for Item No(s). \_\_\_ in the Bid Form.

*If the work of this Section is to be measured and paid for by several different methods, please amend the standard wording given above to reflect the different methods of measurement and payment.*]

# PRODUCTS

## Hardware Items

### Only door locksets and latch, sets listed on CGSB Qualified Products List are acceptable for use on this Contract Work.

### Use one manufacturer's products only for all similar items.

### Contractor shall provide a door hardware schedule to the Consultant for approval by the Region.

## Door Hardware

### Locks and latches:

#### Bored and preassembled locks and latches: Conform to ANSI/BHMA A156.17-2014, [series 2000 preassembled lock, grade 1] [series 4000 bored lock, grade [1] [2] [3]], designed for function [and keyed] as stated in the Hardware Schedule in the Contract Documents. *[Consultant to ensure all schedules are defined in the Contract Documents and amend as required]*

#### Interconnected locks and latches: Conform to ANSI/BHMA A156.12-2013, series 5000 interconnected lock, grade 1 2 3, designed for function and keyed as stated in the Hardware Schedule in the Contract Documents. *[Consultant to ensure all schedules are defined in the Contract Documents and amend as required]*

#### Mortise locks and latches: Conform to ANSI/BHMA A156.13-2012, series 1000 mortise lock, grade [1] [2] [3] [4], designed for function [and keyed] as stated in the Hardware Schedule.

#### Knobs [Lever handles]: [plain] [special (describe)] design.

#### [Roses] [Escutcheons]: [round] [square].

#### Normal strikes: box type, lip projection not beyond jamb.

#### Cylinders: key into keying system as directed by the Consultant.

#### Finished to [\_\_\_\_].

#### All locks shall be in accordance with Property Service’s Division 08 71 60 – Door Hardware for Medeco M3 Logic Cylinders and shall incorporate all information provided in the York Region’s Security Device Summary. [Consultant to ensure documentation provided by the Region is incorporated into the Contract Documents]

### Butts and hinges:

#### Butts and hinges: Conform to ANSI/BHMA A156.18-2012, [designated by letter A and numeral identifiers], [followed by size and finish], listed in Hardware Schedule.

#### Self-closing hinges and pivots: Conform to ANSI/BHMA A156.17-2014, [designated by letter K and numeral identifiers] listed in Hardware Schedule, [with suffix letter F] indicating listed for used on fire doors, finished to [\_\_\_\_\_].

#### Strap and tee hinges and hasps: Conform to ANSI/BHMA A156.20-2006 (R2012), [designated by letter A and numeral identifiers] listed in Hardware Schedule, including sizes which are also listed in the Hardware Schedule in accordance with ANSI/BHMA A156.20-2006 (R2012), table I, finished to 602 (cadmium plated) or 603 (zinc plated).

#### Acceptable Model and Manufacturer:

##### *[Consultant to provide 3 acceptable products]*

##### Approved Equivalent

### Exit devices: Conform to ANSI/BHMA A156.3-2014, type [\_\_\_\_\_], function [\_\_\_\_\_], grade [1] [2], [conventional] [modern] [modern narrow stile] [special *[Consultant to describe if applicable]*] design, finished to [\_\_\_\_\_].

#### Acceptable Model and Manufacturer:

##### *[Consultant to provide 3 acceptable products]*

##### Approved Equivalent.

#### Auxiliary item(s): [door coordinator, type 21, for pairs of doors with overlapping astragals] [     ].

### Door Closers and Accessories:

#### Door controls (closers): Conform to ANSI/BHMA A156.4-2013, [designated by letter C and numeral identifiers] listed in Hardware Schedule, size [\_\_\_\_\_] in accordance with ANSI/BHMA A156.4-2013, table A1, finished to *[Consultant to conform cross reference and finish quality]*.

#### Door controls - overhead holders: Conform ANSI/BHMA A156.8-2010, [designated by letter C and numeral identifiers] listed in Hardware Schedule, finished to [\_\_\_\_\_].

#### Closer/holder release devices: Conform to ANSI/BHMA A156.15-2011, [designated by letter C and numeral identifiers listed in the Hardware Schedule, finished to [\_\_\_\_\_].

#### Door coordinator: [surface] [concealed] for pairs of doors with overlapping.

#### Acceptable Model and Manufacturer:

##### *[Consultant to provide 3 acceptable products]*

##### Approved Equivalent.

### Auxiliary locks and associated products: to ANSI/BHMA A156.5-2014, [designated by letter E and numeral identifiers] listed in Hardware Schedule as listed below, finished to [\_\_\_\_\_].

#### [Latch bolt] [Dead bolt], type [\_\_\_\_\_], finished to [\_\_\_\_\_]. Key into keying system as directed by the Consultant.

#### Cylinders: type [\_\_\_\_\_], finished to [\_\_\_\_\_], for installation in deadlocks provided with special doors as listed in Hardware Schedule. Key into keying system as directed by the Consultant.

#### Acceptable Model and Manufacturer:

##### *[Consultant to provide 3 acceptable products]*

##### Approved Equivalent.

### Architectural door trim: Conform to ANSI/BHMA A156.6-2010, [designated by letter J and numeral identifiers] listed in Hardware Schedule as listed below, finished to [\_\_\_\_\_].

#### Door protection plates: kick plate type [\_\_\_\_\_], [1.27 mm] thick [aluminum] [brass] [stainless steel] [3.2 mm] thick [solid plastic] [laminated plastic], 1 [edges], [size], finished to [\_\_\_\_\_].

#### Push plates: type [\_\_\_\_\_], [1.27] mm thick [aluminum] [brass] [stainless steel] [3.2] mm thick [solid plastic] [laminated plastic], 1 [edges], [size], finished to [\_\_\_\_\_].

#### Push/Pull units: type [\_\_\_\_\_], [combination] [aluminum] [brass] [stainless steel] [wood] [plastic] [stone], [size], finished to [\_\_\_\_\_].

#### Acceptable Model and Manufacturer:

##### *[Consultant to provide 3 acceptable products]*

##### Approved Equivalent.

### Auxiliary hardware: Conform to [ANSI/BHMA A156.16-2013], [designated by letter L and numeral identifiers] listed below, finished to [\_\_\_\_\_].

#### [Combination] [magnetic] [chain] [stop] [and] [holder], [wall] [floor] [door mounted]: type [\_\_\_\_\_], finished to [\_\_\_\_\_].

#### [Surface bolt] [lever extension] [flush bolt] [cremone bolt], type [\_\_\_\_\_], finish to [\_\_\_\_\_].

#### Door silencer: type [\_\_\_\_\_].

#### Chain door guard: type [\_\_\_\_\_].

#### Door knockers: type [\_\_\_\_\_].

#### Door viewer: type [\_\_\_\_\_], listed or labeled for fire doors.

#### Roller latch: type [\_\_\_\_\_].

#### Automatic flush bolts: type [\_\_\_\_\_].

#### Acceptable Model and Manufacturer:

##### *[Consultant to provide 3 acceptable products]*

##### Approved Equivalent

### Door bottom seal: [heavy duty], door seal of extruded aluminum frame and [solid] [hollow] closed cell neoprene weather [\_\_\_\_\_] seal, [recessed in door bottom] [surface mounted] with [drip cap] [recessed in door face], closed ends, [adjustable] [automatic retract mechanism] when door is open, [clear anodized finish].

#### Acceptable Model and Manufacturer:

##### *[Consultant to provide 3 acceptable products]*

##### Approved Equivalent.

### Thresholds: [\_\_\_\_\_] mm wide x full width of door opening, [extruded aluminum] [bronze] [stainless steel] mill finish, [plain] [serrated] surface, [with thermal break of rigid PVC], with [lip] [and] [vinyl door seal insert].

#### Acceptable Model and Manufacturer:

##### *[Consultant to provide 3 acceptable products]*

##### Approved Equivalent.

### Weather stripping:

#### Head and jamb seal:

##### Extruded aluminum frame and [solid] [hollow] [closed cell neoprene] [nylon brush pile] [vinyl] insert, [clear anodized finish].

##### Adhesive backed [neoprene] [vinyl covered foam] material.

#### Door bottom seal:

##### Extruded aluminum frame and [closed cell neoprene] [nylon brush] [vinyl] sweep, [clear anodized finish].

#### Acceptable Model and Manufacturer:

##### *[Consultant to provide 3 acceptable products]*

##### Approved equivalent.

### Astragal: [adjustable] [compensating] [overlapping], [extruded aluminum] frame with [vinyl] [pile] insert, [finished to match doors], [\_\_\_\_\_].

#### Acceptable Model and Manufacturer:

##### *[Consultant to provide 3 acceptable products]*

##### Approved Equivalent

## Miscellaneous Hardware

### Padlocks: [\_\_\_\_\_] size, finish to [\_\_\_\_\_].[\_\_\_\_\_]. Padlocks to conform to Property Services Branch Division 08 71 60 requirements (51S0600-06-FBP – Medeco M3 CLIQ Padlock Cylinder).

### Indexed key control system: Conform to ANSI/BHMA A156.5-2014, designed by letter E and numeral identifiers, [wall mounted] [multiple drawer] [portable] system, type [\_\_\_\_\_],[\_\_\_\_\_] colour enamel paint finish.

## Fastenings

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

### Exposed fastening devices shall match finish of hardware.

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

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

## Keying

### Doors, padlocks and cabinet locks shall be [keyed differently] [keyed alike] [keyed alike in groups] [master keyed] [grand master keyed ] [great grand master keyed] [great grand master keyed] [as noted in Hardware Schedule] [as directed]. Prepare detailed keying schedule in conjunction with [Consultant].

### Provide keys in duplicate for every lock in this Contract.

### Stamp keying code numbers on keys and cylinders.

### Provide construction cores.

### Provide all permanent cores and keys to Consultant.

### Provide [three] master keys for each [MK][GMK] group.

# EXECUTION

## Installation Instructions

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

### Furnish the manufacturers' instructions for proper installation of each hardware component.

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

### Install hardware to standard hardware location dimensions in accordance with Canadian Metric Guide for Steel Doors and Frames (Modular Construction) prepared by the Canadian Steel Door and Frame Manufacturers' Association. [Match existing hardware location.]*[Consultant to confirm reference and amend as required]*

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

### Install key control cabinet.

### Remove construction [cores] [locks] when directed by the Consultant; install permanent cores and check operation of all locks.

## Adjustments

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

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

### Adjust door hardware to provide tight fit at contact points with frames.

## Cleaning

### Perform cleaning after installation to remove construction and accumulated environmental dirt.

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

### Remove protective material from hardware items where present.

### Upon completion of installation, remove surplus materials, rubbish, tools and equipment barriers.

## Demonstration

### Keying System Setup and Cabinet:

#### Set up key control system with file key tags, duplicate key tags, numerical index, alphabetical index and key change index, label shields, control book and key receipt cards.

#### Place file keys and duplicate keys in key cabinet on their respective hooks.

#### Lock key cabinet and turn over key to the [Consultant][Region].

### Maintenance Staff Briefing:

#### Brief maintenance staff regarding:

##### Proper care, cleaning, and general maintenance of the Work’s complete hardware.

##### Description, use, handling, and storage of keys.

##### Use, application and storage of wrenches for [door closers] [locksets] [and fire exit hardware].

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

## Schedule

*[Insert here schedule of hardware required for project. Where possible group together doors, cabinets, closets and drawers, requiring same hardware. Indicate keying and other specific requirements. Following list is for example only.]*

### Double Doors [insert door number]

#### 3 pairs of hinges [A5111, NRP, 114 x 101 mm 630].

#### 1 deadlock [E0151, MK and KA 630].

#### 2 flush bolts [L04081626].

#### 2 pulls [J405], [size] [\_\_\_].

#### 2 push plates [J301], [size] [\_\_\_].

#### 2 closers [C02021] [\_\_\_].

#### 1 threshold [1820 mm long] [\_\_\_].

#### 1 door bottom seals.

### Doors [insert door number]:

#### 1 1/2 pr butts [A8111, 114 x 101 mm 646].

#### 1 lockset [301D, MK and KD 630 3 wall stops L01D 619].

#### 1 kickplate [203 mm high 630].

### *[Use hardware groups for large projects]*

### Hardware group No. 1:

#### 3 pairs of hinges [A5111 NRP 114 x 101 mm 630].

#### 1 deadlock [E0151 GMK 630].

#### 2 flush bolts [L04081 626].

#### 2 pulls J405 [(size)].

#### 2 push plates [J301 (size)].

#### 2 closers [C02021].

#### 1 threshold [1870 mm long].

### Hardware group No. 2:

#### 1 1/2 pair hinges [A8111 114 x 101 mm 646].

#### 1 lockset [301D GMK 630].

#### 1 wall stop [L01D 619].

#### 1 kick plate [302 mm high 630].

**END OF SECTION**