

PART 1 GENERAL

1.1 WORK INCLUDED

- .1 This Section specifies requirements for supplying and installing interior and exterior hollow metal doors, frames, and hardware as indicated.

1.2 RELATED WORK

- .1 Caulking of joints between frames and other building components:
 Section 07 92 00
- .2 Painting: Section 09 91 23

1.3 REFERENCES

- .1 Canadian Steel Door and Frame Manufacturers' Association, (CSDFMA).
 - .1 CSDFMA, Specifications for Commercial Steel Doors and Frames.
 - .2 CSDFMA, Recommended Selection and Usage Guide for Commercial Steel Doors.
 - .3 CSDFMA, Recommended Locations for Hardware for Steel Doors and Frames.
- .2 National Fire Protection Association (NFPA):
 - .1 NFPA 80-2016, Fire Doors and Windows.
 - .2 NFPA 252-2017, Methods of Fire Test of Door Assemblies.
- .3 ASTM A653/A653M-2015E1, Specification for Steel Sheet, Zinc-coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-dip Process.
- .4 CAN/CGSB-1.181-99, Ready-Mixed Organic Zinc-Rich Coating.
- .5 CSA G40.20/G40.21-2013, General Requirements for Rolled or Welded Structural Quality Steel/Structural Quality Steel.
- .6 ULC S104-2015, Fire Test of Door Assemblies.

1.4 SHOP DRAWINGS

- .1 Submit shop drawings and hardware schedule in accordance with Section 01 33 00 using D.H.I. (Door and Hardware Institute) formats.
- .2 Indicate type of door and frame, material, steel core thicknesses, mortises, reinforcements, location of exposed fasteners, finishes and fire ratings.
- .3 Indicate proposed hardware including make, model, material, function, finish and all other pertinent information.

1.5 PRODUCT DELIVERY, STORAGE AND HANDLING

- .1 Brace frame units to prevent distortion in shipment and protect finished surfaces by sturdy protective wrapping.
- .2 Store doors and finishing hardware in a secure, dry location. Remove wrappings when finally stored in location, secure from damage. Store doors vertically with blocking between to allow air to circulate.
- .3 Repair damage to finishes immediately after it occurs to prevent rusting. Use primer for painted surfaces and zinc primer for galvanized surfaces.
- .4 Package each item of hardware separately or in like groups of hardware, label each package as to item definition and location.
- .5 Maintain inventory list with hardware schedule.

1.6 REQUIREMENTS OF REGULATORY AGENCIES

- .1 Steel fire rated doors and frames: labelled and listed by an organization accredited by Standards Council of Canada in conformance with ULC S104M and NFPA 252 for ratings specified or indicated.

PART 2 PRODUCTS

2.1 DOOR MATERIAL

- .1 Sheet steel: 1.2 mm base thickness, commercial grade steel to ASTM A653, hot dipped galvanized, coating designation Z275 for exterior doors.
- .2 Door Core:
 - .1 Exterior hollow steel: vertically stiffened with steel ribs and all voids filled with semi-rigid fibrous insulation minimum density 1.5 pcf.
 - .2 Interior honeycomb: structural core consisting of Kraft paper having 24.5mm cell size to thickness indicated.
- .3 Exterior doors to have caps at top of door.

2.2 FRAME MATERIAL

- .1 Sheet steel: commercial grade steel to ASTM A653, hot dipped galvanized, coating designation Z275 for exterior frames.
 - .1 Frames: 1.6 mm base steel thickness.
 - .2 Floor anchors, channel spreaders and wall anchors: minimum 1.6 mm base steel thickness.
 - .3 Guard boxes: minimum 0.8 mm base steel thickness.
 - .4 Hinge reinforcements: minimum 2.6 mm base steel thickness.
- .2 Top and bottom reinforcing channels: to CSA G40.21-M, type 300W.

- .3 Door bumpers: black neoprene single stud, three (3) for each single door, and two (2) for each double door.
- .4 Frames for exterior doors to be thermally broken and must accommodate expansion and contraction with surface temperature range of -34 deg.C to 76 deg.C. Deflection must not exceed 1/175th of span under wind loads for building locality in accordance with the National Building Code, 2010. Pack frames with fibreglass insulation and/or polyurethane insulation.

2.3 ADHESIVES

- .1 Honeycomb cores and steel components: heat resistant, spray grade, resin reinforced neoprene/rubber (polychloroprene) based, low viscosity, contact cement.
- .2 Polystyrene and polyurethane cores: heat resistant, epoxy resin based, low viscosity, contact cement.

2.4 PRIMER

- .1 Touch up primer for doors and frames to CAN/CGSB-1.181.

2.5 DOOR AND FRAME FABRICATION

- .1 Steel doors to be 45 mm thick unless otherwise indicated.
- .2 Interior frames to be 145 mm butt-mounted; exterior frames to be thermally broken, 146 mm butt mounted; unless otherwise noted on the drawings.
- .3 Fabricate steel doors and frames as detailed, in accordance with Steel Door and Frame Manufacturers' Association, "Canadian Manufacturing Specifications for Steel Doors and Frames".
- .4 Mortise, reinforce, drill and tap doors and reinforcements to receive hardware using templates provided by finish hardware supplier.
- .5 Shop prime cold rolled steel sheet.
- .6 Touch up doors and frames at factory with primer where galvanized finish damaged during fabrication.
- .7 Cut mitres and joints of frames accurately and weld continuously on inside of frame profile.
- .8 Grind welded corners and joints of frames to flat plane, fill with metallic paste filler and sand to uniform smooth finish.
- .9 Prepare doors and frames for installation of hardware. Provide all steel reinforcements. Drill and tap to template information.
- .10 Reinforce all doors and frames for door closers whether closers are

scheduled or not.

- .11 Install three (3) door bumpers on strike jamb for each single door and two (2) door bumpers at head for double doors.
- .12 Reinforce heads of frames wider than 1200 mm.
- .13 Provide floor anchors, adjustable tee anchors, and steel anchors in accordance with Canadian Steel Door and Frame Manufacturers Association. Weld floor anchors to frame.
- .14 Close tops and bottoms of doors with recessed spot welded channel and closures. Mechanically interlock longitudinal edges.
- .15 Install galvanized steel top caps for all exterior doors.
- .16 Construct thermally broken frames using steel core, separating exterior portion of frame from interior portion with polyvinyl chloride thermal break.
- .17 Insulate exterior frame components with polyurethane insulation.

2.6 THERMALLY BROKEN DOORS AND FRAMES

- .1 Fabricate thermally broken doors by using insulated core and separating exterior parts from interior parts with continuous interlocking thermal break.
- .2 Thermal break: rigid polyvinylchloride extrusion conforming to CGSB 41-GP-19Ma.

2.7 HARDWARE MATERIAL

- .1 To Section 08 71 10.

PART 3 EXECUTION

3.1 DOOR INSTALLATION

- .1 Install doors in accordance with manufacturer's instructions.
- .2 Fit doors with 6 mm clearance at jambs and head of frame, and 10 mm clearance over threshold.
- .3 Fabricate thermally broken frames separating exterior parts from interior parts with continuous interlocking thermal break.
- .4 Apply insulation.

3.2 HARDWARE INSTALLATION

- .1 To Section 08 71 10.

3.3 ADJUSTMENT

- .1 Adjust hinged doors to swing freely and easily, to remain stationary at any point of swing, to close evenly and tightly against stops without binding, and to latch positively when doors are closed with moderate force.

3.4 DOOR & HARDWARE SCHEDULE

- .1 Door: sizes and materials as shown on Drawings.
- .2 Hardware: as shown on Drawings.

3.5 FINISH REPAIRS

- .1 Touch up finishes damaged during installation.
- .2 Fill exposed frame anchors, and surfaces with imperfections, marks/scratches/dents, etc with metallic paste filler and sand to a uniform smooth finish. Prime areas affected.
- .3 Finish paint doors and frames as specified in section 09 91 23.

END OF SECTION

PART 1 GENERAL

1.1 WORK INCLUDED

- .1 This Section specifies requirements for supplying, transporting and installing aluminum fixed and operable double/double hung type exterior windows, complete with glazing and caulking.

1.2 RELATED WORK

- .1 Concrete block sills and infill: Section 04 20 00
- .2 Insulating space between frames and other building components: Section 07 21 00
- .3 Caulking of joints between frames and other building components: Section 07 92 00

1.3 REFERENCE

- .1 CAN/CSA-A440-11(R2016), North American Fenestration Standard/Specification for Windows, Doors and Skylights.
- .2 CAN/CGSB-12.3-M91, Flat, Clear Float Glass.
- .3 CAN/CGSB-12.8-M97 "AMEND", Insulating Glass Units.
- .4 CAN/CGSB-79.1-M91, Insect Screens.

1.4 SHOP DRAWINGS

- .1 Submit shop drawings in accordance with Section 01 33 00.
- .2 Clearly indicate materials and large scale details for head, jamb and sill, profiles of components, elevations of unit, anchorage details, location of isolation coating, description of related components and exposed finishes and fasteners.

1.5 MAINTENANCE DATA

- .1 Provide maintenance data for cleaning and maintenance of aluminum windows for incorporation into maintenance manual specified in Section 01 78 00.

1.6 PRODUCT DELIVERY, STORAGE AND HANDLING

- .1 Package or crate units for shipment and storage before installation.
- .2 Provide methods for lifting or hoisting units into place without causing damage.
- .3 Protect prefinished surfaces of metal work with protective coating or wrappings to remain in place until construction completion. Use

materials recommended by finishers or manufacturers of metals to ensure that method is sufficiently protective, easily removed and harmless to finish.

- .4 Remove all protective coatings and wrappings upon completion of work.

PART 2 PRODUCT

2.1 WINDOWS

- .1 Units: thermally broken unit to CAN/CSA-A440, Classification A3, B7, C5, I53 constructed of minimum extruded aluminum alloy 6063-T5, minimum 1.6 mm thick. Rigid insulation strips to be installed in frame voids and caulked-in-place.
- .2 Type: Fixed units with 152 deep frames complete with insulating glass.
- .3 Type: Casement, outward projecting, complete with insulating glass, and insect screen.
- .4 Provide all windows from the same manufacturer.

2.2 MATERIALS

- .1 Extruded aluminum: Aluminum Association alloy AA6063-T5, minimum 1.6 mm wall thickness. Exposed surfaces of aluminum shall be free of die marks, blisters, "leave-off" marks, or other blemishes. Rigid insulation strips to be installed in frame voids and caulked-in-place.
- .2 Finish exposed surfaces of aluminum components in accordance with Aluminum Association Designation System for Aluminum Finishes, finish and colour to match the existing building.
- .3 Sealants: in accordance with Section 07 92 00, colour to match window frames.
- .4 Isolation coating: alkali resistant bituminous paint.
- .5 Glazing:
 - .1 Factory sealed double glazed unit 25 mm overall thickness to CAN/CGSB-12.8-M, glazed in accordance with manufacturer's instructions. Glass thickness 5 mm, float, each lite, CAN/CGSB-12.3-M.
 - .2 For operable units, install 5 mm clear float on exterior sashes and 5 mm clear float on interior sashes.
- .6 Wood blocking, furring, etc.: S2S; standard or better grade, pressure preservative treated.
- .7 Fasteners: corrosion resistant stainless steel.
- .8 Fly screens meeting CAN/CGSB-79.1 and CAN/CSA-A440, rating heavy duty having extruded aluminum frame and screen cloth of 18 x 14 fiberglass mesh. Fly screens mounted between exterior and interior glazing sashes

for double/double hung units and removable from interior of building.

2.3 FABRICATION

.1 Window Members:

.1 Fabricate generally to dimensions and profiles indicated on Drawings and to meet specified requirements. Maintain sight lines indicated and clearances to other construction components.

.2 Fabricate units square and true with maximum tolerance of plus or minus 1.5 mm for units with a diagonal measurement of 1800 mm or less and plus or minus 3 mm for units with a diagonal measurement over 1800 mm.

.3 Thermal Movement: fabricate window units and assemblies to provide for expansion and contraction of component members and between window units when subjected to surface temperatures from -24 deg. C to 82 deg. C.

.4 Air Vapour Retarder: caulking with backer rod, to provide the air/vapour barrier seal on interior side and similarly on exterior side for weather sealing to building.

.5 Dissimilar Materials:

.1 Protect material from electrolytic action when dissimilar metals are in contact with one another.

.2 Protect aluminum concealed in contact with masonry with a heavy coating of bituminous paint. Where exposed to view, use lacquer.

.6 Anchors: incorporate anchorage to structure for window units at sills, heads and jambs to suit masonry coursing, and to support window adequately when subjected to specified loads.

.7 Sills and interior trim:

.1 Fabricate sills and interior trim of extruded aluminum as indicated on Drawings and finish as specified for frames.

.2 Include cover plates at joints between lengths and jamb deflectors.

.3 Fabricate sills and interior trim in continuous length from corner to corner.

.4 Incorporate concealed anchorage of sills, and means for adjustment of level and position during installation.

PART 3 EXECUTION

3.1 INSTALLATION

.1 General:

.1 Install windows plumb, level and in accordance with shop drawings, and fabricator's instructions.

.2 Do not force window units into place, nor superimpose on them loads for which they were not designed.

.3 Provide for thermal movement to take place between window and adjacent construction.

.4 Secure windows by non-corrosive and inorganic anchorage materials.

- .5 Conceal anchors, clips, blocking, and all other attachments.
- .6 Install reinforcing and supporting members as specified or indicated as part of the Work of this Section.
- .7 Seal metal-to-metal joints between components included in the Work of this Section to ensure a weathertight assembly, and in accordance with sealant manufacturer's specifications.
- .8 Fill voids between frames and rough openings, with spray applied polyurethane insulation each side after filling voids with batt insulation as specified in Section 07 21 00.
- .9 Support metal sills throughout their length, bed in place and level.

.2 Caulking:

- .1 Caulk between window unit and adjacent construction at openings (each face), as a part of the Work of this Section and in accordance with Section 07 92 00.

3.2 ADJUSTMENT AND CLEANING

.1 Cleaning on completion of installation:

- .1 Remove deposits which affect appearance or operation of window units.
- .2 Clean interior and exterior surfaces by washing with clear water; or with water, and soap or detergent; followed by a clear water rinse.
- .3 Clean and restore stained metal surfaces in accordance with manufacturer's recommendations. Replace if cleaning is impossible.

END OF SECTION

PART 1 GENERAL

1.1 WORK INCLUDED

- .1 This Section specifies requirements for supplying and installing finish hardware in the locations indicated in the hardware schedule and as specified herein.

1.2 RELATED WORK

- .1 Hollow Metal Doors and Frames: Section 08 11 14.
- .2 Rough Carpentry: Section 06 10 00.

1.3 REFERENCE STANDARDS

- .1 Standard hardware location dimensions in accordance with Canadian Metric Guide for Steel Doors and Frames (Modular Construction) prepared by Canadian Steel Door and Frame Manufacturer's Association.
- .2 ANSI/BHMA A156.1-2016, Butts and Hinges.
- .3 ANSI/BHMA A156.2-2011, Bored and Pre-assembled Locks and Latches.
- .4 ANSI/BHMA A156.4-2013, Door Controls (Closers).
- .5 ANSI/BHMA A156.5-2014, Auxiliary Locks and Associated Products.
- .6 ANSI/BHMA A156.7-2016, Template Hinge Dimensions.
- .7 ANSI/BHMA A156.18-2016, Materials and Finishes.

1.4 REQUIREMENTS OF REGULATORY AGENCIES

- .1 Install only ULC/ULI listed hardware for fire rated doors and frames. Provide latching devices and closing devices where necessary.
- .2 All hardware must comply with all applicable fire, building, life safety, and barrier free codes.
- .3 Hardware for doors in fire separations exit doors certified by ULC, accredited by Standards Council of Canada.

1.5 SAMPLES

- .1 Submit samples in accordance with Section 01 33 00.
- .2 Identify each sample by label indicating applicable specification paragraph number, brand name and number, finish and hardware package number.
- .3 After approval samples will be returned for incorporation in the Work.

- .4 Upon award of Contract, check the schedule of hardware and all applicable drawings and specifications and furnish promptly to the applicable trades all templates and information required for proper preparation and application of hardware, in ample time to facilitate the progress of work.
- .5 Submit maintenance, operating, and installation instructions for installation purposes and to incorporate in project data book.

1.6 DELIVERY AND STORAGE

- .1 Each item of hardware must be clearly itemized and labelled in accordance with the schedule and delivered in the original manufacturer's containers.
- .2 Arrange delivery time and date, to the job site, of all hardware so that all work may progress without delay or interruptions.
- .3 Store and protect all hardware.

1.7 CERTIFICATION

- .1 Have the Hardware Supplier provide a qualified Architectural Hardware Specialist who will cooperate with the installer and clarify the location and/or installation methods of particular items.
- .2 Have the Architectural Hardware Specialist make periodic inspections of the hardware installations and report improper or unsatisfactory conditions to the Departmental Representative and expedite the replacement of faulty hardware. Have this Specialist attend job site meetings when so requested.
- .3 After installation, have a regular member of the Architectural Hardware Consultants (AHC) inspect and certify in writing that all items and their installation are in accordance with specified requirements.

1.8 HARDWARE LIST

- .1 Submit contract hardware list in accordance with Door and Hardware Institute vertical format.
- .2 Indicate specified hardware, including make, model, material, function, size, finish and other pertinent information.
- .3 Prepare and supply and complete itemized hardware schedule for review. Schedule to list all doors by number (in sequence) and location, with complete details of the hardware supplied, including installation heights and special instructions. Format of schedule to be Door and Hardware Institute (DHI) formula.
- .4 Allow for checking all changes to the work of this Section that may be issued and revise the reviewed hardware schedule accordingly. All revisions to the Hardware Schedule shall be submitted for approval.

1.9 EXAMINATION

- .1 Examine the plans and schedules to determine the dimensions, size and quantity of required hardware items and confirm the hardware listed will fit and operate properly. Report all unsatisfactory conditions before ordering.

PART 2 PRODUCTS

2.1 HARDWARE ITEMS

- .1 Only door locksets and latchsets listed on CGSB Qualified Products List are acceptable for use on this project.
- .2 Use one manufacturer's products only for all similar product groups.
- .3 Furnish warranty for all hardware items for a period of one(1) year from date of acceptance of the installation. Ten (10) year warranty for closers and two (2) year warranty on handicap operators.
- .4 All hardware applied to metal doors and frames shall be made to templates together with instructions necessary for door and frame preparation.
- .5 Hardware of same materials shall have consistent colour and finish throughout project.
- .6 Use one (1) manufacturer's products for all similar items.
- .7 Provide a warranty that expressly covers all hardware for a period of one (1) year from date of substantial completion. The warranty must state all hardware will be replaced on the doors and frames at no cost to the Owner in event of breakage or other defect occurring, willful damage, or defective installation excluded.

2.2 MANUFACTURERS

- .1 Certain manufacturer's catalogue numbers are used in the schedule of Finishing Hardware, but it is not the intent that these items are specified exclusively. The manufacturer's numbers are used to indicate quality, style, design, function, finish, and features.
- .2 Other manufacturers will be considered, providing the items meet or exceed the performance, function, and quality requirements of those specified, and are approved by the Consultant.

2.3 DOOR HARDWARE

- .1 Locks and latches:
 - .1 Bored and preassembled locks and latches: to ANSI/BHMA A156.2, series 4000 bored lock, grade 1, designed for function and keyed as stated in Hardware Schedule. Thru-bolted mechanism. Concealed mounting

- screws. ULC listed for 3 hour doors. Backset: 70 mm throughout. Orbit as listed in Schedule Finished to C26D, Satin Chromium plated.
- .2 Mortise locks and latches: Series 1000 mortise lock, grade 1, designed for function and keyed as stated in Hardware Schedule. Orbit design, C26D finish.
- .2 Butts and Hinges: to ANSI/BHMA A156.1 designated by numeral identifiers, followed by size and finish, listed in Hardware Schedule. Use NRP feature on exterior hinges and for reverse swing locked doors. Use anti-friction bearing as noted.
- .1 Hinges: apply hinges to manufacturer's guidelines, supply ball bearing hinges, size as per manufacturer's guidelines. Supply NRP hinges for all locked out-swing doors and non-ferrous hinges in wet or corrosive areas.
- .1 Two (2) hinges on doors up to 1500 mm high.
- .2 Three (3) hinges on doors 1500 mm to 2250 mm high.
- .3 Four (4) hinges on doors 2250 mm to 3000 mm high.
- .3 Door Closers and Accessories:
- .1 Door controls (closers): to ANSI/BHMA A156.4, designated by numeral identifiers listed in Hardware Schedule, factory sized, finished to EN. Provide the product of one manufacturer for closer units throughout the Work. Full rack and pinion type cylinder with removable non-ferrous case and cast iron body. Double heat treated pinion shaft, single piece forged piston, chrome-silicon steel spring. Forged steel main arm. Units stamped with date of manufacture. Ten (10) year warranty on all closers.
- .2 Door controls - overhead holders/stops finished to C26D.
- .4 Door bottom seal: heavy-duty door seal of extruded aluminum frame and brush seal, clear anodized finish.
- .5 Thresholds: 108 mm and 127 mm wide x full width of frame opening, extruded aluminum, mill finish, serrated surface, with thermal break of rigid PVC.
- .6 Weatherstripping:
- .1 Head and Jamb seal: Extruded aluminum frame and solid closed cell neoprene insert, clear anodized finish.
- .7 Bolts: lock inactive leaf of pair of non-egress doors with lever extension flush bolts. Supply automatic flush bolts for fire rated egress doors. Apply to edge of door.
- .8 Locks: heavy duty cylindrical, function as listed in the Hardware Schedule. Knobs in all areas, except for lever design in assisted handicap areas, finished in C26D.
- .9 Push/pull trim: where pull is scheduled on one side of the door and push plate on the other side, supply fastening devices and install so pull can be secured through the door from reverse side. Install push plate to cover fasteners finished to C26D.

- .10 Closing devices: door closers to be modern type, with covers, rack and pinion with compression spring adjusting, closing speed, latching speed, back check, to be controlled by separate valves. Provide all plates, spacers and brackets for proper mount. Factory sized with field adjustability, application as per Hardware Legend, 10 year warranty. Cast iron bodies.
- .11 Kickplates: kickplates to be satin, clear anodized aluminum, 1.3 mm (.050") thick, 305 mm high, and 50 mm less than door width.
- .12 Stops: provide dome, wall or overhead type to stop the door as listed in the Hardware Schedule, finished to C26D.
- .13 Weatherseal: supply aluminum extruded threshold width to the door opening width. Weatherstripping fixed head and jamb. Astragal full height of door. Door bottom full width of door.

2.4 FASTENINGS

- .1 Supply screws, bolts, expansion shields and other fastening devices required for satisfactory installation and operation of hardware.
- .2 Exposed fastening devices to match finish of hardware.
- .3 Use fasteners compatible with materials through which they pass.
- .4 Supply all hardware complete with all necessary screws, bolts or other fastening of suitable size and type to anchor the hardware in position neatly and properly in accordance with the best practices and to the Departmental Representative's approval.
- .5 All fasteners must harmonize with the hardware as to material and finish.

2.5 KEYING

- .1 Key all exterior locks and cylinders alike.
- .2 Provide three (3) keys for each different keyed lock/cylinder.

PART 3 EXECUTION

3.1 INSTALLATION INSTRUCTIONS

- .1 Furnish metal door and frame manufacturers with complete instructions and templates for preparation of their work to receive hardware.
- .2 Furnish manufacturers' instructions for proper installation of each hardware component.
- .3 Install hardware to standard hardware location dimensions in accordance with Canadian Metric Guide for Steel Doors and Frames (Modular Construction) prepared by Canadian Steel Door and Frame Manufacturers'

Association.

- .4 Where door stop contacts door pulls, mount stop to strike bottom of pull.
- .5 Install hardware to standard location dimensions in accordance with Canadian Guide for Doors and Frames.
- .6 Only use tradesmen competent in the installation of Finishing Hardware for this project.
- .7 Accurately locate and adjust hardware to meet manufacturer's instructions. Use special tools and jigs as recommended.
- .8 Locate top hinges with top 125 mm below door top, bottom hinges with bottom 250 mm from floor, and intermediate hinges equidistant between top and bottom hinges.
- .9 Locate door stops to contact doors 75 mm from latch edge.
- .10 Install hardware and trim square and plumb to doors.
- .11 Replace missing hardware to ensure specified installation at time of building completion.
- .12 After installation, replace wrappings for hardware provided by manufacturer.
- .13 Safeguard keys to keep them out of unauthorized hands, tag them with opening number, and deliver them to person designated by the Owner at building completion.

3.2 HARDWARE SCHEDULE

- .1 Provide all hardware listed on the Finishing Hardware Schedule.
- .2 The Finishing Hardware Schedule is furnished as a guide to the type of hardware to be used, but is not intended to be a complete schedule of quantities. Examine the Drawings and Specifications, and supply all hardware to complete the work.

3.3 DOOR HARDWARE SCHEDULE

- .1 Door hardware types are on the architectural drawing.

3.4 ADJUSTMENT AND CLEANING

- .1 Adjust hardware so that latches and locks operate smoothly and without binding, and closers act positively with the least possible resistance in use. Lubricate hardware if required by supplier's instructions.
- .2 Clean hardware after installation in accordance with supplier's

instructions.

END OF SECTION