

PART 1 - GENERAL

1.1 GENERAL REQUIREMENTS

- .1 Comply with requirements of Division 1.

1.2 RELATED SECTIONS

- .1 Section 08 11 00: Steel Doors and Frames.

1.3 SUBMITTALS

- .1 Samples:
 - .1 Submit samples in accordance with Section 01 33 00 – Submittal Procedures.
 - .2 Submit samples of each sign type, size and colour selected.
 - .3 Submit sign list by room cross referencing construction room numbers with designation numbers assigned.

PART 2 - PRODUCTS

2.1 MATERIALS

- .1 Interior door signage: surface engraved signs; signage stock 2 ply acrylic extruded sheets with cap and core sheets permanently fused, 2.50 mm thick. Two colours: one for stock sheet and one for core sheet to be selected by Departmental Representative from manufacturer's standard range at later date.
- .2 Sign Types:
 - .1 S-1: surface engraved room number and name as indicated on schedule; size 100 mm x 150 mm.
 - .2 S-2A: pictogram for washrooms, male or female as required; size 150 mm x 150 mm.
 - S-2B: pictogram for shower room, size 150 mm x 150 mm.
 - .3 S-3: pictogram for stairs: size 150 mm x 150 mm.

2.2 SCHEDULE

- .1 Provide interior signage for the following rooms:
 - .1 One door sign each to schedule attached.

PART 3 - EXECUTION

3.1 FABRICATION

- .1 Fabricate interior signs to numbering system provided by Departmental Representative.
- .2 Provide "Arial, bold" lettering style for door signs; letter size 30 mm high.
- .3 Center lettering in sign stock with minimum 12 mm spacing at top and bottom and 25 mm spacing at both sides.
- .4 All signage lettering to be in French and English. Final sign description to be provided by Departmental Representative prior to fabrication.

3.2 INSTALLATION

- .1 Level and securely install signage by means of screws to doors/walls at mounting heights as directed by Departmental Representative.
- .2 Clean installed signage and replace damaged units to satisfaction of Departmental Representative.
- .3 Provide door signs as per schedule in Item 3.3 below.

3.3 SCHEDULE

Signage Type	Door Number	Door Type	Sign Description	Remarks
BASEMENT				
S-3	001		Stair pictogram	
n/a	X002		-	
S-1	003		003 - LAN ROOM	
S-1	004		004 - ELECTRICAL	
GROUND FLOOR				
n/a	X100		-	
S-1	101A		101A - SGMP	
S-1	101B		101B - SGMP	
n/a	102		-	
S-1	103		103 - SUPERVISOR	
n/a	X104A		-	
n/a	X104B		-	
S-1	107		107 - CUSTODIAL	
n/a	108		-	
S-1 S-2A	109		109 – STAFF washroom pictogram	
S-1	111		111 – OFFICE	
S-1	112		112 - SUPERVISOR	
S-1 S-2A	113		113 – INMATE Washroom pictogram	
S-1	114		114 – STAFF	
S-2B	115		Shower pictogram	
S-2A	116		Washroom pictogram	
n/a	118A		-	
S-1	118B		118B - COOK / CHILL	
S-1	119		119 - INGREDIENT RM	
S-1	121A		121A – DRY GOODS	
S-1	121B		121B – DRY GOODS	

Signage Type	Door Number	Door Type	Sign Description	Remarks
n/a	122		-	
n/a	X122A		-	
n/a	X122B		-	
S-1	123B		123B – WARE WASH	
S-1	124		124 – WARE WASH	
S-1	125A		125A - VESTIBULE	
S-1	125B		125B – FOOD PREP	
S-1	126A		126A - CUSTODIAL	
S-1	126B		126B - CUSTODIAL	
n/a	X129		-	
n/a	X133		-	
S-1	134		134 - VESTIBULE	
S-1	135		135 - CUSTODIAL	
n/a	X136		-	
n/a	X137		-	

END OF SECTION

PART 1 - GENERAL

1.1 SUMMARY

- .1 Comply with requirements of Division 1.

1.2 RELATED WORK

- .1 Section 10 28 13: Washroom Accessories.

1.3 REFERENCES

- .1 ASTM A167-2004 Specification for Stainless and Heat-Resisting Chromium-Nickel Steel Plate, Sheet, and Strip.
- .2 CAN3-A172 High Pressure Paper Base, Decorative Laminates.
- .3 CAN/CBSB-71.20 – M88, Adhesive, Contact Brushable.
- .4 CAN/CSA-B651-2004, Accessible Design for the Built Environment.

1.4 SUBMITTALS

- .1 Submit shop drawings in accordance with Section 01 33 00 – Submittal Procedures.
- .2 Shop drawings and samples:
 - .1 Show plans, elevations, details of construction, anchorage and attachment to adjacent construction, accessories and hardware, and installation details.
 - .2 Submit duplicate 300 x 300 mm samples of panel showing finish on both sides, finished edges and core construction.
 - .3 Provide maintenance data for plastic laminate for incorporation into manual specified in Section 01 78 00 – Closeout Submittals.
- .3 Operations and maintenance data:
 - .1 At completion of work, provide maintenance data for incorporation into manual specified in Section 01 78 00 – Closeout Submittals.
 - .2 Provide product catalogue information, maintenance data, cleaning instructions, contact information for product manufacturer, sustainable product certificates, warranty and warranty information and copy of reviewed shop drawings.

1.5 DELIVERY STORAGE AND HANDLING

- .1 Deliver, store, handle and protect materials in accordance with Section 01 61 00 – Common Product Requirements.
- .2 Protect finished laminated plastic surfaces during shipment and installation. Do not remove protective coverings until immediately prior to final inspection.

1.6 WASTE MANAGEMENT AND DISPOSAL

- .1 Separate and recycle waste materials in accordance with Section 01 74 22 - Construction / Demolition Waste Management and Disposal.

- .2 Remove from site and dispose of all packaging materials at appropriate recycling facilities.
- .3 Collect and separate for disposal paper, plastic, polystyrene, corrugated cardboard and packaging material in appropriate on site bins for recycling in accordance with Waste Management Plan.

1.7 WARRANTY

- .1 Provide manufacturer's standard warranty against defect in materials and workmanship, and manufacturer's extended written warranty, minimum 10 years, for all components such as doors, panels and stiles against breakage, delamination and degradation.

PART 2 - PRODUCTS

2.1 MATERIALS

- .1 Solid Plastic (Phenolic) Toilet Partitions: floor mounted, head-rail braced, fused plastic laminated solid plastic (phenolic) toilet partition system, institutional class.
 - .1 Acceptable products:
 - .1 Duraline # 1080 Series Solid Phenolic Partitions and Screens - by Bobrick Washroom Equipment of Canada Ltd.
 - .2 Floor Anchored/Overhead Braced Toilet Compartments – Phenolic by Global Steel Products Corp./ASI Watrous Inc.
 - .3 Thick Stock Solid Core Phenolic Panels by Decolam Inc.
 - .4 Series 400-Sentinel Floor Mounted Overhead Braced, Phenolic Toilet Partitions by Bradley Corporation.
- .2 Product Performance Requirements:
 - .1 Fire Resistance: Flame spread index (ASTM E 84): 45 for panels, doors and stiles.
 - .2 Smoke Developed Index (ASTM E 84): 120 for panels, 95 for doors and stiles.
 - .3 Graffiti, scratch and impact resistance: to ASTM E 84.
- .3 Laminated plastic sheets: 1.0 mm GP grade, urea-formaldehyde free, printed pattern, one colour to be selected by DCC Representative from manufacturer's standard range.
- .4 Core material: solid phenolic core, urea-formaldehyde free, multiple resin-impregnated kraft and surface sheets fused at high temperatures and pressure, edges machined and finished smooth with bevelled edges, colour: black.
 - .1 Panels: 19 mm. minimum
 - .2 Doors: 19 mm. minimum
 - .3 Pilasters: 19 mm. minimum
- .5 Laminated plastic adhesive: to CAN/CGSB-71.20, max. VOC limit to SCAQMD Rule 1168, urea-formaldehyde free.
- .6 Stainless steel sheet metal: to ASTM A167, Type 304, with No. 4 satin finish.

- .7 Headrails: clear anodized extruded aluminum with anti-grip design with cast end socket brackets, securely attached to wall and pilasters so as to make a rigid installation
- .8 Pilaster shoe: stainless steel with #4 satin finish, minimum 75 mm high.
- .9 Attachment: stainless steel tamperproof type screws and bolts. All door hardware to be through bolted.

2.2 HARDWARE

- .1 Hardware: heavy-duty, institutional class hardware with tamper proof fasteners, type 304, cast stainless steel with satin brushed finish and with stainless steel fasteners necessary for complete installation.
- .2 Hinges:
 - .1 Heavy duty, wraparound type, through bolted to pilasters, with gravity-acting cams, 3 hinges per door.
 - .2 Material/finish: type 304, cast stainless steel with satin brushed finish.
 - .3 Swing: inward or outward as indicated on drawings.
 - .4 Return movement: gravity.
 - .5 Adjustable to hold door open at any angle up to 90°.
- .3 Slide Latch, Stop and Keeper: surface mounted, stainless steel with satin finish, emergency access feature.
- .4 Wall and connecting brackets: 1.2mm (18 Ga) stainless steel with # 4 satin finish and extend for full height of panel.
- .5 Coat hook:
 - .1 Combination hook and rubber door bumper, stainless steel with satin finish for each in-swinging door.
 - .2 Stainless steel with satin finish for each out-swinging door.
- .6 Door pulls: barrier-free type, stainless steel, 150 long minimum, to inside and outside of out-swinging doors.
- .7 Emergency access feature: to allow locked door to be opened from outside compartment by lifting the door.

2.3 FABRICATION

- .1 Doors: minimum 19 mm thick, solid phenolic core with plastic laminate surface sheets, edges machined and finished smooth with bevelled edges. In-swinging doors: 650 mm wide x 1470 mm high. Out-swinging doors: 800 mm wide x 1470 mm high.
- .2 Panels: minimum 19 mm thick, solid phenolic core with plastic laminate surface sheets, edges machined and finished smooth with bevelled edges, panel sizes as indicated x 1470 mm high.
- .3 Pilasters: 19 mm thick, solid phenolic core with plastic laminate surface sheets, edges machined and finished smooth with bevelled edges, same as door, to sizes indicated x 1830 mm high.

PART 3 - EXECUTION

3.1 MANUFACTURER'S INSTRUCTIONS

- .1 Compliance: comply with manufacturer's written recommendations or specifications, including product technical bulletins, handling, storage and installation instructions, and datasheets.

3.2 INSTALLATION

- .1 Ensure supplementary anchorage, if required, is in place.
- .2 Do work in accordance with CAN/CSA-B651.

3.3 ERECTION

- .1 Partition Erection.
 - .1 Install partitions secure, plumb and square in accordance with manufacturers installation instructions.
 - .2 Leave maximum 12 mm space between wall and panel or end pilaster.
 - .3 Provide continuous full height stainless steel mounting bracket between wall and panel or end pilaster. Clearance at vertical edges of door shall be uniform top and bottom.
 - .4 Anchor fixing brackets to masonry/concrete surfaces using screws and shields: to hollow walls using bolts and toggle type anchors, to steel supports with bolts in threaded holes.
 - .5 Attach panel and pilaster to brackets with through-type sleeve bolt and nut.
 - .6 Provide for adjustment of floor variations with screw jack through steel saddles made integral with pilaster. Conceal floor fixings with stainless steel shoes.
 - .7 Equip each inswinging door with hinges, slide latch, stop and keeper and coat hook mounted on back of door, mounting height 1500 AFF
 - .8 Equip each outswinging door with hinges, slide latch, stop, and keeper, door pulls and coat hook mounted on side wall, mounting height 1400 AFF. Install one "D" type door pull, mounted horizontally on inside of door with centreline between 200 and 300 mm from hinged side of door at outside door-handle height, and one "D" type door pull, mounted vertically on outside of door near latch side of door.
- .2 Floor supported and overhead braced partition erection.
 - .1 Attach pilasters to floor with pilaster supports and level, plumb, and tighten installation with levelling device.
 - .2 Secure pilaster shoes in position.
 - .3 Secure headrail to pilaster face with not less than two fasteners per face.

.2 (continued)

.4 Set tops of doors parallel with overhead brace when doors are in closed position. All doors and panels to be mounted 300 mm above finished floor.

.3 Screen erection.

.1 Anchor screen panels to walls with panel brackets and pilaster complete with floor shoe and anchored to floor.

.4 Adjust and align hardware for proper function.

.5 Set door open position at 30 degrees to front.

3.4 CLEANING AND ADJUSTMENT

.1 Proceed in accordance with Section 01 74 11 – Cleaning.

.2 At completion of work remove all protective coverings and clean all finished surfaces. Surfaces to be free of imperfections, and defects in workmanship with no evidence of cutting, drilling and / or patching visible on finished work.

.3 Test hinges, locks and latches and where necessary, adjust and lubricate and ensure that all are in perfect working order.

END OF SECTION

PART 1 - GENERAL

1.1 GENERAL REQUIREMENTS

- .1 Comply with requirements of Division 1.

1.2 RELATED SECTIONS

- .1 Section 06 10 00: Rough carpentry.
- .2 Division 26 - electrical connections for hand dryers

1.3 REFERENCES

- .1 ASTM A167, Specification for Stainless and Heat-Resisting Chromium - Nickel Steel Plate, Sheet, and Strip.
- .2 ASTM A526, Specification for Steel Sheet, Zinc-Coated (Galvanized) by the Hot - Dip process, Commercial Quality.
- .3 ASTM B456, Specification for Electrode posited Coating of Copper Plus Nickel Plus Chromium and Nickel Plus Chromium.
- .4 CAN/CGSB - 12.5, Mirrors, Silvered.
- .5 CAN/CSA - B651, Barrier-Free Design.

1.4 SHOP DRAWINGS

- .1 Submit shop drawings in accordance with Section 01 33 00 – Submittal Procedures.
- .2 Indicate size and description of components, base material, surface finish inside and out, hardware and locks, attachment devices, description of rough-in-frame, building-in details of anchors for grab bars.

1.5 CLOSEOUT SUBMITTALS

- .1 Provide operations and maintenance data for toilet and bath accessories for incorporation into manual specified in Section 01 78 00 – Closeout Submittals.

1.6 EXTRA MATERIALS

- .1 Provide special tools required for accessing, assembly/disassembly or removal for toilet and bath accessories in accordance with requirements specified in Section Submittals.
- .2 Deliver special tools to Departmental Representative.

1.7 WASTE MANAGEMENT AND DISPOSAL

- .1 Separate and recycle waste materials in accordance with Section 01 74 21 - Building Construction/Demolition Waste Management and Disposal.
- .2 Remove from site and dispose of all packaging materials at appropriate recycling facilities.

- .3 Collect and separate for disposal paper, plastic, polystyrene, corrugated cardboard and packaging material in appropriate on site bins for recycling in accordance with Waste Management Plan.
- .4 Fold up metal banding, flatten and place in designated area for recycling.

PART 2 - PRODUCTS

2.1 MATERIALS

- .1 Sheet steel: commercial quality to ASTM A526M with ZF001 designation zinc coating.
- .2 Stainless steel sheet metal: to ASTM A167, Type 304, with satin finish.
- .3 Stainless steel tubing: Type 304, commercial grade, seamless welded, 1.2 mm wall thickness.
- .4 Fasteners: tamper proof, concealed screw and bolts hot dip galvanized, exposed fasteners to match face of unit. Expansion shields fibre, lead or rubber as recommended by accessory manufacturer for component and its intended use.

2.2 COMPONENTS

- .1 Toilet Tissue Holder (TTH): supplied by Departmental Representative, installed by Contractor.
- .2 Soap Dispenser (SDP): supplied by Departmental Representative, installed by Contractor.
- .3 Grab bars (GBR): 32 mm dia x 1.6 mm wall tubing of stainless steel, 38 mm diameter wall flanges, concealed screw attachment, flanges welded to tubular bar, provided with steel back plates and all accessories. Knurl bar at area of hand grips. Grab bar material and anchorage to withstand downward pull of 2.2 kN. Grab bar types: GBR-1: 600 mm L.; GBR-2: 900 mm L.
 - .1 Acceptable products:
 - .1 B-5806 by Bobrick.
 - .2 3100-P by Watrous.
 - .3 832-2 Series by Bradley.
 - .4 1001DP by Frost Products.
 - .5 or approved equal.
 - .4 Robe Hook (RBH):
 - .1 For installation in single occupant washrooms and where indicated - robe hook, type 304 stainless steel, satin finish with 50 mm projection:
 - .1 B-6717 by Bobrick.
 - .2 7340-S by Watrous.
 - .3 9114 by Bradley.
 - .4 or approved equal.
- .5 Mirror (MIR): stainless steel angle framed mirror, 6 mm float glass, triple silvered, sealed, concealed secure fastening:
 - .1 Size: 460 x 915 mm.

.5 (continued)

.2 Acceptable products:

- .1 B-290 by Bobrick.
- .2 0600-A by Watrous.
- .3 780 by Bradley.
- .4 941 by Frost Products.
- .5 or approved equal.

.6 Sanitary Napkin Disposal (SND): stainless steel, recessed disposal unit with hinged stainless steel door, self closing, door embossed with "push", locking. Unit approximately 270 mm wide, 500 mm high, 115 mm deep, #4 Satin finish.

.1 Acceptable products:

- .1 B-35303 by Bobrick
- .2 1013 by Watrous
- .3 4737 by Bradley
- .4 or approved equal.

.2 surface mounted unit, model similar to above.

.7 Hand Dryer (HD): listed under re-examination service of ULC and CSA approved.

.1 Electrical input voltage: 120 V AC, single phase 60Hz, rated power: 1400 W. Motor type: Dyson digital motor, switched reluctance brush less motor speed: 81,000 rpm. Heater type: none; Standby power consumption: 1w, energy consumption per dry: 0.00467 kWh.

.2 Construction: die-cast aluminium casing with anti-microbial resistant lacquer coating on exterior surfaces. Colour finish: metallic silver, glass lacquer. Anti-microbially impregnated external plastics and seals, galvanized steel backplate / mounting bracket. Tamper proof T30 type exterior screws, water ingress protection to PIX5.

.3 Filtration anti-microbial HEPA filter particulate removal tested to 99.95% at 0.3 microns according to ASTM 1977 Bacteria removal less than 99.9%, operation touch-free infra-red activation.

.4 Hand dry time: 12 seconds (measured to method defined within National Sanitation Foundation protocol P335) Operation lock-out period: 30 seconds, Airspeed at nozzle: 640 km/h. Operating airflow: 31.151 l/s / 66.1 CFM. Rated operating noise power: 85 dB(A).

.8 Shower Curtain and Rod (SC/R):

.1 Shower Curtain: 1830 mm high x opening width + 150 mm minimum, .31 mm (8 gauge), vinyl fabric, flame resistant, anti-bacterial with clear anodized aluminium grommets. Shower curtain hooks: 2 mm dia. solid formed type 304 stainless steel wire hooks for 32 mm dia. shower rod:

- .1 204-2 Curtain / 204-1 Hooks by Bobrick.
- .2 1200-V Curtain / 1200-SHU Hooks by Watrous.
- .3 9537 Curtain / 9536 Hooks by Bradley.
- .4 or approved equal.

.2 Shower Rod: 32mm dia., 1.2 (18 gauge) x length to suit opening, with 76 mm dia. (20 gauge) type 304 stainless steel concealed flanges:

- .1 B-6047 by Bobrick.

.2 (continued)

- .2 1204 Extra Heavy Duty Rod by Watrous.
- .3 9531 by Bradley.
- .4 or approved equal.

.9 Towel Bar (TB): 610 mm long x 32 mm dia., 1.2 mm (18 gauge), type 304 stainless steel, satin finish, with 76 mm dia. flange, concealed screw attachment, flanges welded to tubular bar, provided with steel back plates and all accessories:

.1 Acceptable products:

- .1 B-5806 by Bobrick.
- .2 3100 Series by Watrous.
- .3 832-4 Series by Bradley.
- .4 or approved equal.

.10 Solid Phenolic Folding Shower Seat: all metal support mechanism fabricated of 18-8 alloy type 302 stainless steel. Seat support and support legs shall be 25mm and 32mm sq. x 18 Ga. with stainless finish with 4.8 thick mounting flanges and 16 Ga. guide bracket support. Seat shall be 8mm thick solid phenolic with beige colour top and bottom surfaces. Support arm shall fold up when in retracted position. Note: General Contractor to coordinate solid blocking in wall.

2.3 FABRICATION

- .1 Weld and grind joints of fabricated components flush and smooth. Use mechanical fasteners only where approved.
- .2 Wherever possible form exposed surfaces from one sheet of stock, free of joints.
- .3 Brake form sheet metal work with 1.5 mm radius bends.
- .4 Form surfaces flat without distortion. Maintain flat surfaces without scratches or dents.
- .5 Back paint components where contact is made with building finishes to prevent electrolysis.
- .6 Hot dip galvanize concealed ferrous metal anchors and fastening devices to CSA G164.
- .7 Shop assemble components and package complete with anchors and fittings.
- .8 Deliver inserts and rough-in frames to job site at appropriate time for building-in. Provide templates, details and instructions for building in anchors and inserts.
- .9 Provide steel anchor plates and components for installation on studding and building framing.

2.4 FINISHES

- .1 Stainless steel satin finish to ASTM-A167.

- .2 Chrome and nickel plating: to ASTM B456, satin finish.
- .3 Baked enamel: condition metal by applying one coat of metal conditioner to CGSB 31-GP -107Ma, apply one coat Type 2 primer to CAN/CGSB-1.81 and bake, apply two coats Type 2 enamel to CGSB -1-GP - 88M and bake to hard, durable finish. Sand between final coats. Colour selected from manufacturers standard range by Departmental Representative.
- .4 Manufacturer's or brand names on face of units not acceptable.

PART 3 - EXECUTION

3.1 INSTALLATION

- .1 Provide mounting and anchorage devices to be built into walls and other construction elements as required to securely anchor components in place. Do not install items unless back-up surfaces are adequately reinforced to support the item.
- .2 Securely anchor components in place. Mount items securely with non-corrosive, concealed or tamper-proof fastenings. Method of fastening shall ensure that components will be capable of withstanding expected loads without movement. Repair construction voids produced by the work of this section to match existing surfaces.
- .3 Strictly adhere to manufacturer's instructions. Ensure guarantee conditions are met. Obtain Departmental Representative's and manufacturer's approvals prior to deviations from manufacturer's procedures.
- .4 Provide mounting and anchorage devices to be built into walls and other construction elements as required to securely anchor components in place.
- .5 Install framed mirrors with concealed wall hangers and lock in place with theft-proof screws.
- .6 Insulate accessory surfaces to prevent electrolysis due to contact with dissimilar metal surfaces. Use bituminous paint or other approved means.

3.2 CLEANING AND ADJUSTMENT

- .1 Test mechanisms, hinges, locks and latches and where necessary, adjust and lubricate and ensure that accessories are in perfect working order.
- .2 Clean, dust units in accordance with Section 01 74 11 – Cleaning.
- .3 At completion of work remove all protective coverings and clean all finished surfaces. Surfaces to be free of imperfections and defects in workmanship.
- .4 Upon completion of installation, remove surplus materials, rubbish, tools and equipment.

3.3 SCHEDULE

- .1 Locate accessories where indicated, exact locations to be determined on site by Departmental Representative.
- .2 Toilet tissue holders: one beside each water closet.
- .3 Sanitary napkin disposal bin: one beside water closet in Room (109).
- .4 Hand dryers: where shown on drawings. Maximum height of operating part 1200 AFF.
- .5 Grab bars: two per water closet, in Room (109) as shown on drawings. Height of bar from floor 750mm. Side grab bar: maximum distance from rear wall 300mm, minimum distance beyond front edge of toilet 450mm.
- .6 Shower rod and curtains: in shower compartments in Rooms (109), (113) and (114).
- .7 Soap dispensers: one beside each wash basin in Rooms (109), (113) and (114).
- .8 Mirrors: where shown on drawings.
- .9 Robe Hooks: where shown on drawings.
- .10 Towel bar: one, where shown, in shower compartments in Rooms (109), (113) and (114).
- .11 Solid phenolic folding shower seat: one, in Shower Room 115.

END OF SECTION

PART 1 - GENERAL

1.1 GENERAL REQUIREMENTS

- .1 Comply with requirements of Division 1.

1.2 RELATED SECTIONS

- .1 Section 04 22 00: Concrete Unit Masonry.
- .2 Section 06 10 00: Rough Carpentry.

1.3 REFERENCES

- .1 CAN/CGSB-44.40, Steel Clothing Locker.

1.4 SHOP DRAWINGS

- .1 Submit shop drawings in accordance with Section 01 33 00 – Submittal Procedures.
- .2 Indicate type and class of locker, thicknesses of metal, fabricating and assembly methods, assembled banks of lockers, tops, hooks, shelves, bases, trim, numbering, filler panels, end/back panels, doors, handles, locking method, ventilation method and finishes.
- .3 Submit locker numbering system for approval by Departmental Representative.

1.5 SAMPLES

- .1 Submit samples in accordance with Section 01 33 00 – Submittal Procedures.
- .2 Submit duplicate 50 x 50 mm samples of colour and finish on actual base metal.

1.6 WASTE MANAGEMENT AND DISPOSAL

- .1 Separate and recycle waste materials in accordance with Section 01 74 21 – Construction / Demolition Waste Management and Disposal.
- .2 Remove from site and dispose of all packaging materials at appropriate recycling facilities.
- .3 Collect and separate for disposal paper, plastic, polystyrene, corrugated cardboard and packaging material in appropriate on site bins for recycling in accordance with Waste Management Plan.
- .4 Divert unused metal materials from landfill to metal recycling facility as approved by Departmental Representative.
- .5 Fold up metal banding, flatten and place in designated area for recycling.

PART 2 - PRODUCTS

2.1 MATERIALS

- .1 Lockers: to CAN/CGSB-44.40, Type 1, single tier staff locker, banks of steel lockers where indicated.
 - .1 Size: 305 mm wide x 460 mm deep x 1830 mm high; single tier, prefinished steel frame.
 - .2 Assembly: welded construction.
 - .3 Top: sloped.
 - .4 Doors: one piece, ventilated, double walled envelope construction, door thickness 1.52 mm (16 gauge) outer panel, .76 mm (22 Ga.) inner door panel, door flush with frame with 1.52 mm (16 Ga.) continuous hinge.
 - .5 Door handle: recessed handle with hasp, bright metal finish.
 - .6 Locking system: 2.67 mm (12 gauge) welded hasp for padlock (padlock by Owner).
 - .7 Individual box base: recessed 44mm from face of locker bank x 90mm high, galvanized steel construction.
 - .8 Accessories: one (1) upper shelf, double prong clothes hook, wall trim filler panels, finished end panels, louvers and vents.
 - .9 Finish: doors, frames, sloped tops, end panels, box base, trims and filler panels to be baked enamel finish. One colour to be selected at later date by Departmental Representative from manufacturer's standard colour range.
 - .10 Locker number plates: manufacturer's standard plastic number plate.
 - .11 Acceptable products and manufacturers:
 - .1 "Titan" Series by GSS.
 - .2 50 Series "Nova" by Lincora Canada Inc.
 - .3 "Emperor" by Hadrian Manufacturing Inc.
 - .4 SML Delux Single Tier Lockers by Shanahan's Manufacturing Ltd.
 - .5 or approved equal.

PART 3 - EXECUTION

3.1 INSTALLATION

- .1 Assemble and install lockers in accordance with manufacturer's written instructions. Install lockers in true alignment, plumb and level.
- .2 Install individual box bases. Securely fasten lockers to bases. Shim and level lockers to plumb installation. Use concealed fasteners.
- .3 Install trim, filler panels and closures where indicated and where obstructions occur. Install in longest possible lengths.
- .4 Install finished end and back panels to exposed ends of locker banks.
- .5 Install sloped locker tops.
- .6 Install locker numbers to approved numbering system.

- .7 Upon completion, test doors and adjust, if required for proper functions. Touch up minor surface scratches and imperfections. Replace damaged components.

3.2 CLEANING AND ADJUSTMENT

- .1 Proceed in accordance with Section 01 74 11 – Cleaning.
- .2 At completion of work remove all protective coverings and clean all finished surfaces. Surfaces to be free of imperfections and defects in workmanship.
- .3 Test hinges, latches and where necessary, adjust and lubricate and ensure that all are in perfect working order.
- .4 Upon completion of installation, remove surplus materials, rubbish, tools and equipment.

END OF SECTION

PART 1 - GENERAL

1.1 GENERAL REQUIREMENTS

- .1 Comply with requirements of Division 1.

1.2 RELATED SECTION

- .1 Section 06 10 00: Rough Carpentry.
- .2 Section 06 20 00: Finish Carpentry.
- .3 Section 06 40 00: Architectural Woodwork.
- .4 Section 09 21 16: Gypsum Board Assemblies.

1.3 SUBMITTALS

- .1 Product Data:
 - .1 Submit manufacturer's printed product literature, specifications and datasheet in accordance with Section 01 33 00 - Submittal Procedures.
- .2 Shop drawings:
 - .1 Submit shop drawing in accordance with Section 01 33 00 – Submittal Procedures.
 - .2 Indicate fabrication details, plans, elevations, hardware, and installation details.

1.4 PRODUCT DELIVERY, STORAGE AND PROTECTION

- .1 Protect product finished surfaces during shipment and installation. Do not remove protective coverings until immediately prior to final inspection.
- .2 Protect products from dampness, humidity, heat, excessive dryness and direct sunlight. Arrange for delivery after work causing abnormal humidity has been completed.
- .3 Store products in well ventilated room, off floor, in accordance with manufacturer's recommendations. Room must be clean, dry, free of dirt and water, and protected from the elements.
- .4 Protect products from scratches, handling marks and other damage. Individually package products in scuff and water resistant wrappings. Do not remove protective coverings from units until ready for installation.

1.5 WASTE MANAGEMENT AND DISPOSAL

- .1 Separate and recycle waste materials in accordance with Section 01 74 22 - Construction/Demolition Waste Management and Disposal.
- .2 Remove from site and dispose of all packaging materials at appropriate recycling facilities.

- .3 Collect and separate for disposal paper, plastic, polystyrene, corrugated cardboard and packaging material in appropriate on site bins for recycling in accordance with Waste Management Plan.

PART 2 - PRODUCTS

2.1 MATERIALS

- .1 Materials: new, free from defects impairing strength, durability or appearance of best commercial quality for purpose specified.
- .2 Materials sufficient thickness and strength to produce finished work free of warping, buckling, open seams, weld marks, base fitting and other defects.

2.2 RECESSED FLOOR GRILLE

- .1 Recessed floor grille: extruded 6105 T5 alloy aluminum, tread rails, with aluminum alloy key lock bars, clear anodized finish, carpet
 - .1 Tread rails: extruded, 6105 T5 alloy aluminum, with aluminum alloy key lock bars, clear anodized finish.
 - .2 Carpet: 29 oz., colorfast, anti-static carpet fibre, fusion bonded to rigid 2-ply backing to prevent fraying, with anti-microbial additive and Scotchgard treatment. Colour to be selected by Departmental Representative at later date.
 - .3 Recessed frame: 46 mm recessed level base frame, 6105 T5 alloy aluminum with 12 mm exposed surface, 1.52 mm (16 Ga.) aluminum pan.
 - .4 Acceptable Product:
 - .1 Model # G1-C-CP-9322-LBDP by Construction Specialties Inc.
 - .2 Model # BC1 T180 by Grillage Bolar Canada Inc.
 - .3 Model ST-28 c/w ST-ANC Frame – recessed floor grates by STENA Inc. (Foot Grilles) Columbia Partitions, A Division of PSISC.
 - .4 or approved equal.

2.3 CORNER GUARDS

- .1 Stainless steel corner guards: surface mounted, 90° corner guard with 89mm legs x 1200 mm height, 16 gauge type 304 stainless steel with # 4 satin finish. Surface mounted with construction adhesive.
Acceptable Product:
 - .1 Model CO-8 stainless steel corner guards by Construction Specialties.
 - .2 equivalent models by other manufacturers accepted by Departmental Representative during tender period.

PART 3 – EXECUTION

3.1 MANUFACTURER'S INSTRUCTIONS

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

3.2 EXAMINATION

- .1 Examine completed work on which installation is dependent. Do not begin installation until substrates have been properly prepared and completed
- .2 Verify rough-in openings are properly prepared.

3.3 WORKMANSHIP AND INSTALLATION

- .1 Work under this section shall include complete installation of items specified herein. Install components and equipment in accordance with manufacturer's printed instructions.
- .2 Ensure supplementary anchorage, if required, is in place.
- .3 Secure in place rigidly as follows:
 - .1 Metal stud partitions: into wood or metal reinforcing back-up placed prior to gypsum board application.
 - .2 Hollow masonry units: use toggle bolts drilled through core of units or if solid bearing cinch anchors.

3.4 RECESSED FLOOR GRILLE

- .1 Install recessed floor grille where indicated on drawings as follows:
 - .1 Entrance Vestibule (101): 1800 wide x 1200 mm long.

3.5 CORNER GUARDS

- .1 Install stainless steel corner guards at all outside corners at gypsum board partitions and where indicated on Drawings.

3.6 PROTECTION

- .1 Protect install products until completion of project.
- .2 Touch-up, repair or replace damaged products before Substantial Completion.

3.7 CLEANING

- .1 Clean in accordance with Section 01 74 11 – Cleaning.
- .2 On completion, touch up marred or abraded finished surfaces. Replace damaged components.
- .3 Upon completion of installation, remove surplus materials, rubbish, tools and equipment.

END OF SECTION