

PART 1 - GENERAL

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| <u>1.1 RELATED REQUIREMENTS</u> | .1 Section 09 21 16 - Gypsum Board Assemblies. .2 Section 09 22 16 - Non-structural Metal Framing. |
| <u>1.2 REFERENCES</u> | .1 American Society for Testing and Materials International, (ASTM). .1 ASTM A 167-99, Specification for Stainless and Heat-Resisting Chromium-Nickel Steel Plate, Sheet, and Strip. .2 ASTM A 240/A 240M-02, Specification for Chromium and Chromium-Nickel Stainless Steel Plate, Sheet, and Strip for Pressure Vessels and for General Applications. .3 ASTM A 480/A 480M-03, Specification for General Requirements for Flat-Rolled Stainless and Heat Resisting Steel Plate, Sheet, and Strip. .4 ASTM A 653/A 653M-02a, Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process. .2 Canadian General Standards Board (CGSB). .1 CAN/CGSB-1.81-M90, Air Drying and Baking Alkyd Primer for Vehicles and Equipment. .2 CAN/CGSB-1.88-92, Gloss Alkyd Enamel Air Drying and Baking. .3 CAN/CGSB-1.104M-91, Semigloss Alkyd, Air Drying and Baking Enamel. .3 Canadian Standards Association (CSA International). .1 CAN/CSA-B651-95(R2001), Barrier-Free Design. |
| <u>1.3 ACTION AND INFORMATIONAL SUBMITTALS</u> | .1 Product Data: .1 Submit manufacturer's printed product literature, specifications and data sheet in accordance with Section 01 33 00 - Submittal Procedures. .2 Submit two copies of WHMIS MSDS - Material Safety Data Sheets in accordance with Section 01 33 00 - Submittal Procedures. Indicate VOC's: .1 For caulking materials during application and curing. .2 Shop Drawings: .1 Submit shop drawings in accordance with Section 01 33 00 - Submittal Procedures. .2 Indicate fabrication details, plans, elevations, hardware, and installation details. .3 Samples: .1 Submit samples in accordance with Section 01 33 00 - Submittal Procedures. .2 Submit duplicate 300 x 300 mm samples of panel |

showing finished edge and corner construction and core construction.

.3 Submit duplicate representative samples of hardware items, including brackets, fastenings and trim.

.4 Manufacturer's Instructions:

.1 Submit manufacturer's installation instructions.

.5 Manufacturers' Field Reports: submit copies of manufacturers' field reports.

1.4 QUALITY ASSURANCE

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

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

.3 Pre-Installation Meetings: conduct pre-installation meeting to verify project requirements, manufacturer's installation instructions and manufacturer's warranty requirements.

1.5 WASTE MANAGEMENT AND DISPOSAL

.1 Remove from site and dispose of packaging materials at appropriate recycling facilities.

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

PART 2 - PRODUCTS

2.1 MATERIALS

.1 Metal toilet partitions.

.2 Sheet steel: commercial quality to ASTM A653 with ZF001 designation zinc coating.

.3 Minimum base steel thickness:

.1 Panels and doors: 25mm thick with cover sheets not less than 0.8 mm.

.2 Pilasters: 1.0 mm.

.3 Reinforcement: 3.0 mm.

.5 Headrails: 25 mm x 41 mm x 1.5 mm thick, clear anodized, extruded aluminum, double-ridge anti grip design.

.6 Pilaster shoe or ceiling trim: 0.8 mm stainless steel, 75 mm high.

- .7 Attachment: stainless steel tamperproof type screws and bolts.

2.2 COMPONENTS

- .1 Hinges:
 - .1 Heavy duty, non-lubricating nylon bushings.
 - .2 Material/finish: stainless steel.
 - .3 Swing: double action.
 - .4 Return movement: gravity.
 - .5 Emergency access feature.
- .2 Latch set: built-in, combination latch, combination door-stop, keeper and bumper, stainless steel.
- .3 Wall and connecting brackets: stainless steel extrusion or casting.
- .4 Coat hook: combination hook and rubber door bumper, stainless steel.
- .5 Door pull: Barrier-free type suited for out swinging doors, stainless steel.

2.3 FABRICATION

- .1 Doors, panels and screens: 25 mm thick, two steel sheets faces pressure bonded to honeycomb core, to sizes indicated.
- .2 Pilasters: 32 mm thick, constructed same as door, to sizes indicated.
- .3 Provide formed and closed edges for doors, panels and pilasters. Miter and weld corners and grind smooth.
- .4 Provide internal reinforcement at areas of attached hardware and fittings. Temporarily mark location of reinforcement for tissue holders and grab bars.

2.4 FINISHES

- .1 Clean, degrease and neutralize steel components with phosphate or chromate treatment.
- .2 Spray apply primer to CAN/CGSB-1.81, 1 coat.
- .3 Spray apply finish enamel to CAN/CGSB-1.104, Type 2, semi-gloss, 2 coats and bake to smooth, hard finish 0.025 mm thick.
- .4 Finish: doors and pilaster/panels same colour as selected from manufacturer's standard colours, total 1 colour for project.

PART 3 - EXECUTION

3.1 MANUFACTURER'S INSTRUCTIONS

- .1 Compliance: comply with manufacturer's written data, including product technical bulletins, product

catalogue installation instructions, product carton installation instructions, and data sheets.

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.
 - .2 Leave 12 mm space between wall and panel or end pilaster.
 - .3 Anchor mounting brackets to masonry/concrete surfaces using screws and shields: blocking/backing must be provided to hollow walls using bolts and toggle type anchors, or per manufacturer's written instructions.
 - .4 Attach panel and pilaster to brackets with self-drilling screws with through type sleeve bolt and nut.
 - .5 Provide for adjustment of floor-braced pilasters ceiling variations with screw jack through steel saddles made integral with pilaster. Conceal floor and ceiling fixings with stainless steel shoes.
 - .6 Equip doors with hinges, latch set, and each stall with coat hook mounted on door, mounting heights as indicated. Adjust and align hardware for easy, proper function. Set door open position at full open. Install door bumper wall mounting.
 - .7 Equip outswinging doors with door pulls on inside and outside of door in accordance with CAN/CSA-B651.
- .2 Floor supported and overhead braced partition erection.
 - .1 Attach pilasters to floor with pilaster supports, floor channel adjust and level, plumb, and tighten installation with levelling device secure to floor channe.
 - .1 Secure pilaster shoes in position.
 - .2 Secure headrail to pilaster face with not less than two fasteners per face.
 - .3 Set tops of doors parallel with overhead brace when doors are in closed position.
 - .2 Floor supported partition erection.
 - .1 Secure pilasters to floor with pilaster supports anchored with minimum 50 mm penetration in structural floor.
 - .2 Level, plumb and tighten installation with levelling device.
 - .3 Secure pilaster shoes in position.
 - .4 Set tops of doors level with tops of pilasters when doors are in closed position.

3.4 ADJUSTING

- .1 Adjust doors and locks for optimum, smooth operating condition.

3.5 CLEANING

- .2 Lubricate hardware and other moving parts.
- .1 Perform cleaning after installation to remove construction and accumulated environmental dirt.
- .2 Clean surfaces after installation using manufacturer's recommended cleaning procedures.
- .3 Clean aluminum with damp rag and approved non-abrasive cleaner.
- .4 Clean and polish hardware and stainless components.
- .5 Upon completion of installation, remove surplus materials, rubbish, tools and equipment barriers.

PART 1 - GENERAL

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| <u>1.1 RELATED REQUIREMENTS</u> | .1 | Section 09 21 16 - Gypsum Board Assemblies. |
| | .2 | Section 09 22 16 - Non-structural Metal Framing |
| <u>1.2 REFERENCES</u> | .1 | American Society for Testing and Materials International (ASTM) .1 ASTM A 653/A 653M-01a, Standard Specification for Steel Sheet, Zinc-Coated, (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process. System Reference Guide For Commercial Interiors. |
| | .2 | Canadian General Standards Board (CGSB) .1 CAN/CGSB-1.81-M90, Air Drying and Baking Alkyd Primer for Vehicles and Equipment. .2 CAN/CGSB-1.88-92, Gloss Alkyd Enamel, Air Drying and Baking. .3 CAN/CGSB-1.104-M91, Semigloss Alkyd, Air Drying and Baking Enamel. |
| | .3 | Canadian Standards Association (CSA International) .1 CSA-G40.20-[04]/G40.21-02, General Requirements for Rolled or Welded Structural Quality Steel/Structural Quality Steel. .2 CAN/CSA-G164-M92(R2003), Hot Dip Galvanizing of Irregularly Shaped Articles. .3 CSA W59-[03], Welded Steel Construction (Metal Arc Welding). |
| | .4 | Health Canada/Workplace Hazardous Materials Information System (WHMIS) .1 Material Safety Data Sheets (MSDS). |
| <u>1.3 ACTION AND INFORMATIONAL SUBMITTALS</u> | .1 | Provide submittals in accordance with Section 01 33 00 - Submittal Procedures. |
| | .2 | Product Data: .1 Submit manufacturer's printed product literature for wire mesh partitions or components, specifications and datasheet and include product characteristics, performance criteria, physical size, finish and limitations. .2 Submit two copies WHMIS MSDS - Material Safety Data Sheets. |
| | .3 | Shop Drawings: .1 Indicate partition panel modules and types, materials, gauges, finishes, door and other openings, hardware, fastening methods to adjacent structure, ceiling details, and assembly methods. |
| | .4 | Samples: |

- .1 Submit duplicate 300 x 300 mm samples of each type partition and colour and finish on actual base metal.
- .2 Sample to show basic construction.
- .3 Erect trial assembly of at least two modules of each type partition, on site where directed by Departmental Representative.

1.4 DELIVERY, STORAGE AND HANDLING

- .1 Deliver, store and handle materials in accordance with Section 01 61 00 - Common Product Requirements.

PART 2 - PRODUCTS

2.1 MATERIALS

- .1 Partition mesh: galvanized.
 - .1 Steel wire mesh: diamond configuration, to MW9.1 (10 gauge) in flat sheets.
- .2 Bolts, fasteners and fastening hardware: tamper proof screws or rivets.

2.2 FABRICATION

- .1 Panels:
 - .1 Fabricate panels 2400 x 1200 mm and special sizes or shapes as required consisting of wire mesh screwed to steel studs at 75mm O.C.
 - .2 Overlap mesh by 127mm at joints.

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 ERECTION

- .1 Install mesh enclosures in accordance with manufacturer's printed instructions.
- .2 Erect enclosures plumb, level, straight, rigidly supported, and securely fastened to abutting surfaces, free from superimposed loads.

3.4 CLEANING

- .1 On completion and verification of performance of installation, remove surplus materials, excess materials, rubbish, tools and equipment.

PART 1 - GENERAL1.1 RELATED
REQUIREMENTS

- .1 Section 09 21 16 - Gypsum Board Assemblies.

1.2 REFERENCES

- .1 Aluminum Association (AA)
 - .1 AA DAF 45-03(R2009), Designation System for Aluminum Finishes.
- .2 South Coast Air Quality Management District (SCAQMD), California State, Regulation XI. Source Specific Standards
 - .1 SCAQMD Rule 1168-A2005, Adhesives and Sealants Applications.

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 corner guards and include product characteristics, performance criteria, physical size, finish and limitations.
 - .2 Submit 2 copies of WHMIS MSDS in accordance with Section 01 35 29.06 - Health and Safety Requirements. Indicate VOC's for material as follows:
 - .1 Caulking materials during application and curing.
 - .2 Adhesives.
- .3 Installation Drawings:
 - .1 Indicate on drawings large scale details, materials, finishes, dimensions, anchorage and assembly.
- .4 Samples:
 - .1 Submit duplicate 30] mm long samples of profiles and colours for corner guards.

1.5 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 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 corner guards from nicks, scratches, and blemishes.

- .3 Replace defective or damaged materials with new.

PART 2 - PRODUCTS

2.1 MATERIALS

- .1 Metal corner guards: 1.6mm thick stainless steel, 50mm x 50mm size, to underside of ceiling. Refer to plans for ceiling heights, length not to exceed 3048mm. Type double bend, 304 satin finished stainless steel, with removable protective paper cover, surface mechanically mounted.

2.3 FINISHES

- .1 Finish exposed surfaces of aluminum components in accordance with Aluminum Association Designation System for Aluminum Finishes.
- .2 Appearance and properties of anodized finishes designated by the Aluminum Association as Architectural Class 1, Architectural Class 2, and Protective and Decorative.

PART 3 - EXECUTION

3.1 EXAMINATION

- .1 Verification of Conditions: verify that conditions of substrate previously installed under other Sections or Contracts are acceptable for corner guards installation in accordance with manufacturer's written instructions.
 - .1 Visually inspect substrate in presence of Departmental Representative.
 - .2 Inform Departmental Representative of unacceptable conditions immediately upon discovery.
 - .3 Proceed with installation only after unacceptable conditions have been remedied and after receipt of written approval to proceed from Departmental Representative.

3.2 MANUFACTURER'S INSTRUCTIONS

- .1 Compliance: comply with manufacturer's written data, including product technical bulletins, product catalogue installation instructions, product carton installation instructions, and data sheets.

3.3 INSTALLATION

- .1 Install units on solid backing and erect with materials and components straight, tight and in alignment.
- .2 Mechanically fasten corner guards as indicated.

3.4 CLEANING

- .1 Progress Cleaning:
 - .1 Leave Work area clean at end of each day.
- .2 Perform cleaning after installation to remove construction and accumulated environmental dirt.

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- .3 Clean surfaces after installation using manufacturer's written recommended cleaning procedures.
 - .4 Upon completion of installation, remove surplus materials, rubbish, tools and equipment barriers.
 - .5 Final Cleaning: upon completion remove surplus materials, rubbish, tools and equipment.

3.5 PROTECTION

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