SECTION  – metal toilet partitions

1. General
   1. SUMMARY

SPEC NOTE: Edit the following to reflect what is required on the Project. Delete paragraphs that are not required on this Project.

* + 1. This Section includes requirements for supply and installation of metal toilet partitions and accessories required for a complete and functioning installation, in the following configuration:

SPEC NOTE: This is only one of the four standard configurations, but the one in this Section is the most common one. Consult the Spec Leader if you require one of the other three configurations identified in the next SPEC NOTE.

SPEC NOTE: Other types include Floor Mounted Only (weak design) Ceiling Hung (great for cleaning but costly because framing needs to be added to the ceiling to support the partitions), and Floor and Ceiling Mounted (overkill installation – used in areas of extreme abuse).

* + - 1. Floor Mounted / Overhead Braced.
  1. REFERENCE STANDARDS
     1. Canadian Standards Association (CSA):
        1. CAN/CSA B651.2-07(R2012), Accessible Design for Self-Service Interactive Devices.
     2. American National Standards Institute (ANSI):
        1. ANSI/ICC A117.1-2009, Standard for Accessible and Usable Buildings and Facilities..
     3. American Society for Testing and Materials (ASTM):
        1. ASTM A167‑99 (2009), Standard Specification for Stainless and Heat‑Resisting Chromium‑Nickel Steel Plate, Sheet, and Strip.
        2. ASTM A653/A653M-11, Standard Specification for Steel Sheet, Zinc Coated (Galvanized) or Zinc Iron Alloy Coated (Galvannealed) by Hot Dip Process.
     4. Canadian General Standards Board (CGSB):
        1. CAN/CGSB-1.108-M89, Bituminous Solvent Type Paint.
  2. DESIGN CRITERIA
     1. Design: "barrier free access" toilet compartments conforming to CAN/CSA-B651-M, ANSI A117.1 and local Building Code requirements.
  3. ADMINISTRATION REQUIREMENTS
     1. Coordination: Coordinate site dimensions affecting work of other Sections and provide data, dimensions and components, anchors and assemblies installed by other Sections in sufficient time for installation of products specified in this Section.
  4. SUBMITTALS
     1. Provide submittals in accordance with Section 01 33 00 – Submittal Procedures.
     2. Action Submittals: Provide the following submittals before starting work of this section:
        1. Product Data: Submit product data from manufacturer indicating proposed components and installation requirements.
        2. Shop Drawings: Show and describe in detail materials, finishes, dimensions, details of connections and fastenings elevations, plans, sections, metal thicknesses, hardware, and any other pertinent information.
        3. Samples:
           1. Submit duplicate 305mm x 305mm (12" x 12") samples of panel showing finish on both sides, two finished edges and core construction.
           2. Submit duplicate representative samples of each hardware item, including brackets, fastenings, and trim.

Submit necessary templates and instructions where supports or anchors have to be built-in by others.

* + 1. Provide maintenance data for maintenance of metal finishes work for incorporation into Maintenance Manual.
  1. DELIVERY, STORAGE AND HANDLING
     1. Delivery and Acceptance Requirements: Deliver, handle and store prefabricated units in accordance with manufacturer's directions.
     2. Store units at site on raised wood pallets protected from the elements and corrosive materials, and Do not remove from crates or other protective covering until ready for installation.
  2. SITE CONDITIONS
     1. Site Measurements: Verify dimensions by site measurements before fabrication and indicate measurements on shop drawings where toilet compartments are indicated to fit between or around other construction; coordinate fabrication schedule with construction progress to avoid delaying the Work.
     2. Established Dimensions: Establish dimensions and proceed with fabricating toilet compartments without site measurements where site measurements cannot be made without delaying the Work; coordinate construction to ensure that actual site dimensions correspond to established dimensions; allow for trimming and fitting.

1. Products
   1. APPROVED PRODUCTS AND MANUFACTURERS
      1. Toilet Partitions: Floor mounted / overhead rail braced type; metal toilet partitions:

SPEC NOTE: Select one of the following options and delete the option not required on this Project.

* + - 1. [Basis of Design Materials: Elite Max, Headrail Braced Toilet Partitions by Hadrian Manufacturing Inc.] [Model and Manufacturer: As indicated in Section 09 06 05 – Product and Finish Schedule].
  1. MATERIALS
     1. Doors, Panels, Pilasters and Headrails: Sheet steel with commercial quality hot dipped zinc coating, in accordance with ASTM A653/A653M, Commercial Steel (CS), ZF001 (A01) galvannealed, bonded each side of paper honeycomb core with returned and sealed edges.
        1. Minimum steel thickness:
           1. Doors and Panels: 22 gauge.
           2. Pilasters and head rails: 20 gauge.
     2. Pilaster Support: Adjustable bolts with stainless steel collar to ASTM A167.
     3. Pilaster Shoes: 100mm (4”) high, two-piece stainless steel.
     4. Anchor Hardware: Wall and panel brackets, chrome plated non‑ferrous die cast zinc alloy or clear anodized aluminum castings and extrusions.
     5. Finish Hardware: Hinge housing, surface mounted, coat hook and bumper, and pull handles for barrier free doors, door stop and keeper, to manufacturer’s standard bright finish.
     6. Latch Set: Built-in, with emergency access feature to manufacturer’s standard bright finish.
     7. Exposed Fasteners: Cadmium plated steel, vandal resistant type.
     8. Concealed Fasteners: Steel, hot dipped galvanized.
     9. Bituminous Paint: CAN/CGSB-1.108, Type 2.
     10. Butyl Tape: Extruded, high grade macro-polyisobutylene tape of width and shore hardness to suit conditions.
     11. Hardware and Fittings:
         1. Compartment panels and pilasters shall be secured with brackets made of brush finish extruded aluminum alloy.
         2. Doors: Provide gravity type hinges, full concealed within the thickness of the door during operation.
         3. Hinges: Adjustable to permit door to come to rest at specified angle when not latched.
         4. Mount doors on upper and lower pilaster hinge brackets of chrome plated zinc die castings.
         5. Provide reinforcement for washroom accessories as required to preserve integrity of partition panels and as required to ensure secure attachment of accessories.
  2. FABRICATION
     1. Shop fabricates toilet partitions. Take site measurements for areas where partitions are to be located and fabricate toilet partitions to suit site dimensions.
     2. Fabricate doors, panels, and pilasters from sheet steel laminated to both sides of core material, under pressure, using waterproof adhesive. Finished doors and panels shall be 25mm (1") thick and pilasters shall be 32mm (1-1/4") thick.
     3. Check sizes and locations for washroom accessories and if necessary, reinforce panels.
     4. Form all edges of doors, panels, and pilasters and secure together with continuous flat locking strip with mitred and welded corners.
     5. Fill depressions and cavities with metal filler, sand smooth, degrease and clean thoroughly.
     6. Prepare panels to accept tissue dispensers and grab bars where indicated on drawings.
     7. Design supports to withstand, within acceptable deflection limitations, their own weight, the weight of the toilet compartments, loads imposed by the motion of compartment doors and all live loads, which might be applied to the toilet compartments in the course of their normal function. Design supports as required to accommodate structural deflection. Build in reinforcing to support the grab bars and withstand a downward pull of 500 lbs. at any point on the grab bar.
  3. FINISHES
     1. Finish surfaces of doors, pilaster, and partition panels with two (2) coats of baked thermosetting acrylic enamel.

SPEC NOTE: Select one of the following “finish options” below and delete the option not required on this Project.

* + - 1. Colour: [As selected by the Consultant from the manufacturers standard colour line.] [As indicated in Section 09 06 05 – Product and Finish Schedule] [LIST COLOUR HERE].

1. Execution
   1. EXAMINATION
      1. Examine site conditions where Work will be applied and ensure acceptability for complete and satisfactory installation; beginning of installation will denote acceptance of site conditions.
   2. INSTALLATION
      1. Install metal toilet partitions according to manufacturer's installation recommendations.
      2. Install partitions plumb, level and securely fastened in the locations shown on the drawings.
      3. Perform drilling of steel, masonry and concrete necessary to install the work of this Section.
      4. Anchor mounting brackets to masonry/concrete surfaces using screws and shields: to hollow walls using bolts and toggle type anchors.
      5. Provide for adjustment of floor variations with screw jack through steel saddles made integral with pilaster. Conceal floor fixings with pilaster shoes.
      6. Co-ordinate installation with the work of trades providing wall and floor finishes, washroom accessories and other adjacent partitions and constructions.
      7. Isolate contact surfaces to prevent electrolysis due to metal contact with masonry, concrete or dissimilar metal surfaces. Use bituminous paint, building paper, butyl tape or other approved means.
      8. Install hardware supplied under this Section and ensure that it is visually aligned.
      9. Securely install extruded aluminum headrail to wall and pilasters with fittings to make a strong and rigid installation.
   3. FIELD QUALITY CONTROL
      1. Install partitions allowing the following clearances and tolerances:
         1. Between panel edges and wall: ±3mm (1/8").
         2. Between partition panel edge and pilaster panel: ±3mm (1/8").
         3. Between pilaster panel edge and door edge: ±3mm (1/8").
         4. Ensure that partitions are visually aligned from all viewpoints.
   4. Floor Supported, 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 head rail to pilaster face with not less than two fasteners for each face.
      4. Set tops of doors parallel with overhead brace when doors are in closed position.
   5. ADJUSTING
      1. Upon completion of the work or when directed, remove all traces of protective coating or paper, and polish all surfaces.
      2. Test hinges, locks, and latches and where necessary, adjust and lubricate. Set hinges so that doors stand open 30 deg when compartment is not in use. Ensure that partitions are in working order.
   6. CLEANING
      1. Clean and make good surfaces soiled or otherwise damaged in connection with the work of this Section. Replacing finishes or materials that cannot be satisfactorily cleaned.
      2. Upon completion of the work, remove all debris, equipment and excess material resulting from the work of this Section from the Site.

END OF SECTION