SECTION 10 51 43 – wire mesh storage lockers

1. General
   1. SUMMARY
      1. This Section includes requirements for supply and installation of a proprietary, pre-engineer enclosure system consisting of panels, posts, doors, and hardware.
      2. Related Requirements:
         1. Section 05 50 00 – Metal Fabrications.
   2. DEFINITIONS
      1. Proprietary Demountable Partition System: Basis of Design materials are specified as complete partitions supplied and installed by this Section including materials specified in other Sections; other Sections are referenced as a central location for common material requirements and are not intended to establish work results outside of this Section.
   3. REFERENCE STANDARDS
      1. American Society for Testing and Materials (ASTM):
         1. ASTM A 653/A 653M-13, Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process.
      2. Canadian Standards Association (CSA):
         1. CAN/CSA S136-12, North American Specification for the Design of Cold-Formed Steel Structural Members.
   4. administrative requirements
      1. Pre-Construction Meeting: Arrange a meeting with Contractor, Subcontractor, other subcontractors affected by work of this Section, Consultant and Owner in accordance with Section 01 31 19 – Project Meetings, to discuss installation and coordination of wire mesh partitions.
      2. Coordination:
         1. Coordinate anchorage and fixing requirements for items supported by or anchored to permanent construction; provide attachment devices applicable to materials being fastened to permanent construction.
         2. Coordinate erection of wire mesh partitions with electrical, where wired hardware is required.
   5. SUBMITTALS
      1. Provide required information in accordance with Section 01 33 00 – Submittal Procedures.
      2. Action Submittals: Provide the following submittals before starting any Work of this Section:
         1. Product Data: Submit standard construction details, material descriptions, dimensions of individual components and finishes.
         2. Shop Drawings: Submit plans, elevations, sections, details, and attachments to other work.
   6. PROJECT CLOSEOUT SUBMISSIONS
      1. Operation and Maintenance Data: Submit manufacturer's written instructions for maintenance of operable components and cleaning procedures, include name of original installer and contact information in accordance with Section 01 77 19 – Closeout Requirements.
   7. quality assurance
      1. Qualifications: Provide proof of qualifications when requested by Consultant:
         1. Manufacturer: Obtain wire mesh partition components from one source from a single manufacturer, with a minimum of ten (10) years experience in the design and fabrication of pre-engineered steel-framed enclosure systems.
         2. Installer: Use an installer trained and approved by manufacturer who is responsible for assembling and installing wire mesh partition systems in accordance with manufacturer's written requirements.
   8. DELIVERY, STORAGE AND HANDLING
      1. Delivery and Acceptance Requirements: Deliver wire mesh partitions with protective wrapping on perimeters of panels and doors, designed to prevent damage to materials during transit and on-site storage.
      2. Storage and Handling Requirements:
         1. Inventory wire mesh partition components when delivered to project site and confirm that materials required for installation are accounted for on the delivery manifest.
         2. Deliver keys to Owner by registered mail or confirmed courier service to Owner's address identified in Contract Documents.
   9. SITE CONDITIONS
      1. Site Measurements: Verify dimensions by site measurements before fabrication and indicate measurements on shop drawings where wire mesh partitions 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 wire mesh partitions 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.
2. Products
   1. MANUFACTURERS
      1. Basis of Design Products: Products named in this Section were used as the basis of design for the project; additional manufacturers offering similar products may be incorporated into the work of this Section provided they meet the performance requirements established by the named products and provided they submit requests for substitution a minimum of five (5) days in advance of Bid Closing.
      2. Acceptable Materials Manufacturers: Subject to compliance with requirements specified in this Section and as established by the Basis of Design Materials, manufacturers offering products that may be incorporated into the Work include but are not limited to, the following:
         1. Cogan Wire and Metal Products Ltd.
   2. materials
      1. Pre-engineered enclosure system consisting of welded, steel-framed panels, posts, doors, and hardware; and as follows:
         1. Panel Frame: 12-gauge structural angle, 31 mm x 31 mm (1-1/4" x 1-1/4"); complete with notched corners, seam welded.

SPEC NOTE: This manufacturer offers the following as well: (2" x 1") & (1" x 1") welded wire mesh. the one listed below is most economical design.

* + - 1. Panel Fabric: 10-gauge, 50 mm x 50 mm (2" x 2") welded wire mesh. Fabric shall be welded to frame every 150 mm (6").
         1. Reinforce panels which exceed 2440 mm (8') in height, with 13 mm (1/2") solid round bar, dividing the panel in three (3) equal sections.
      2. Posts: Standard 50 mm x 50 mm (2" x 2") seam welded square steel tube, complete with welded base plate of 150 mm x 150 mm x 6 mm (6" x 6" x 1/4") steel. Space posts at 2440 mm (8') o.c., unless otherwise recommended by wire mesh manufacturer.
      3. Swing Doors: Swing doors shall be made of the same material and in the same method as the panels. In addition, one 32 mm x 3 mm (1-1/4" x 1/8") flat steel bar welded across the center and two 1/2" round diagonal stay bars shall be included on the door panel.
         1. Doors shall be equipped with a set of padlocking hasps, two door stoppers and one pair of 13 mm (1/2") steel pin hinges.
      4. Sliding Doors: Sliding doors shall be made of the same material and in the same method as the panels. In addition, sliding door panels shall be reinforced with a 38 mm (1-1/2") square tube, bolted to the front and leading edges.
         1. Sliding doors shall be equipped with guide track with three support hangers, a door guide, a receiver and one set of hasps for padlocking.
      5. Roofs: Roof panels shall be made of the same material and in the same method as the panels and are designed for security purposes only. Roof panels are not designed to resist loads.
      6. Finish: All components shall be powder-coated grey.
      7. Hardware: As provided by the wire mesh manufacturer. Floor and wall anchors are not part of the supplied hardware.

1. Execution
   1. examination
      1. Verification of Conditions: Verify that substrates and services required for wire mesh partitions are in place, and that installation tolerances are acceptable before beginning of installation of products specified in this Section.
      2. The area where the partition enclosure is installed shall have a concrete slab, troweled smooth and level. Working areas shall be inspected and cleaned of all debris to ensure that adequate access is provided to the installers.
      3. Advise of any embedded floor obstacles that may interfere with the installation of floor anchors prior to installation of wire mesh partitions.
      4. Installation of products specified in this Section will denote acceptance of site conditions.
   2. ERECTION
      1. Manufacturer's Instructions: Install wire mesh partitions in accordance with manufacturer's written instructions and shop drawing requirements; braced and supported to meet requirements of local Authority Having Jurisdiction using fasteners and anchorages recommended by the manufacturer.
      2. Erect partitions plumb, square and level; accurately fitted and fastened to adjacent construction; adjust for floor irregularities and maintain level lines relative to ceiling construction.
   3. CLOSEOUT ACTIVITIES
      1. Adjusting:
         1. Adjust doors and operating hardware to operate easily without binding; leave work in complete and proper operating condition; remove and replace defective work including doors and framing that are warped, bowed or otherwise unacceptable.
      2. Touch Up Finishing: Repair or replace abraded or damaged finishes to match adjacent materials; remove and replace panels and other components that are damaged, improperly installed or soiled beyond satisfactory cleaning.
      3. Cleaning: Clean floor, ceiling and wall surfaces soiled as a result of Work of this Section.

END OF SECTION