SECTION 10605

WIRE MESH PARTITIONS

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Wire mesh system for walls.

B. Access sliding door.

1.02 RELATED REQUIREMENTS

A. Section 08710 - Door Hardware: Cylinders for locksets.

1.03 REFERENCE STANDARDS

A. ASTM A 36/A 36M - Standard Specification for Carbon Structural Steel.

B. ASTM A 123/A 123M - Standard Specification for Zinc (Hot-Dip Galvanized) Coatings on Iron and Steel Products.

C. ASTM A 500 - Standard Specification for Cold-Formed Welded and Seamless Carbon Steel Structural Tubing in Rounds and Shapes.

D. ASTM A 501 - Standard Specification for Hot-Formed Welded and Seamless Carbon Steel Structural Tubing.

E. ASTM A 510 - Standard Specification for General Requirements for Wire Rods and Coarse Round Wire, Carbon Steel.

F. ASTM A 510M - Standard Specification for General Requirements for Wire Rods and Coarse Round Wire, Carbon Steel (Metric).

G. ASTM A 653/A 653M - Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process.

H. ASTM A 1008/A 1008M - Standard Specification for Steel, Sheet, Cold-Rolled, Carbon, Structural, High-Strength, Low Alloy, and High-Strength Low-Alloy with Improved Formability, Solution Hardened, and Bake Hardenable.

I. ASTM C 847 - Standard Specification for Metal Lath.

J. AWS D1.1/D1.1M - Structural Welding Code - Steel; American Welding Society.

K. SSPC-Paint 15 - Steel Joist Shop Primer; Society for Protective Coatings.

L. SSPC-Paint 20 - Zinc-Rich Primers (Type I, "Inorganic," and Type II, "Organic"); Society for Protective Coatings.

1.04 DESIGN REQUIREMENTS

A. Design partition system to provide for movement of components without damage, undue stress on fasteners or other detrimental effects, when subject to design loads.

B. Design system to accommodate construction tolerances, deflection of building structural members, and clearances of intended openings.

1.05 SUBMITTALS

A. See Section 01350 - Submittals, for submittal procedures.

B. Product Data: Provide data for screen materials, finishes.

C. Shop Drawings: Indicate plan and vertical dimensions, elevations, component details; head, jamb, and sill details; location of hardware. Provide component details, framed openings,

bearing, anchorage, loading, welds, type and location of fasteners, and accessories or items required of related work.
   1. Show field measurements on shop drawings.

D. Manufacturer's Installation Instructions: Indicate special procedures, perimeter conditions requiring special attention.

1.06 QUALITY ASSURANCE

A. Manufacturer Qualifications: Company specializing in manufacturing products specified in this section, with not less than three years of documented experience.

PART 2 PRODUCTS

2.01 MANUFACTURERS

A. Wire Mesh Partitions:
   1. Acorn Wire and Iron Works, Inc: www.acornwire.com.
   2. The G-S Company: www.g-sco.com.
   3. Miller Wire Works, Inc: www.millerwireworks.com.
   4. California Wire Products Corp.: www.cawire.com.
   5. Substitutions: See Section 01640 - Substitutions and Product Options.

2.02 MATERIALS

A. Framing Members: ASTM A 36/A 36M steel members, ASTM A 500, Grade B cold-formed steel tubing, square, rectangular, and channel shaped.

B. Woven Screen Wire: ASTM A 510 (ASTM A 510M) uncoated double crimped steel wire; conforming to the following:
   1. Warp Wire Size: 10 gage.
   2. Mesh Size: 1.5 x 1.5 in. diamond.
   3. Mesh Weave Design: Double crimp design.

C. Welding Materials: AWS D1.1; type required for materials being welded.

2.03 FASTENERS

A. Bolts, Nuts and Washers: Manufacturer's standard.

B. Anchorage Devices: Provide drilled expansion bolts and screws with sleeves.

C. Exposed Mechanical Fastenings: Flush countersunk screws or bolts, unobtrusively located, consistent with design of structure.

2.04 ACCESSORIES

A. Bracing: Formed sheet steel, thickness determined for conditions encountered, manufacturer's standard shapes, same finish as framing members.

B. Plates, Gussets, Clips: Formed sheet steel, thickness determined for conditions encountered, manufacturer's standard shapes, same finish as framing members.

C. Post Caps: Manufacturer's standard.

D. Floor Pilaster Shoe: Manufacturer's standard.

E. Floor Base: Manufacturer's standard.

F. Shop and Touch-Up Primer:
   1. Ferrous Surfaces: SSPC-Paint 15, complying with VOC limitations of authorities having jurisdiction.

2.05 HARDWARE

A. Mortise locks: Manufacturer's standard.

B. Cylinders for Locksets: Specified in Section 08710.

2.06 COMPONENTS

A. Basic components for normal industrial use.

B. Corner Posts: 1-1/4 x 1-1/4 inch angles.

C. Intermediate Posts: 1-1/4 x 5/8 inch cold-rolled "C" section channels.

D. Intermediate Horizontal Members: 1 x 1/2 inch cold-rolled channels.

E. Top Rail Horizontal Members: 2-1/4 x 1 inch cold-rolled channel.

2.07 FABRICATION

A. Fit and assemble in largest practical sections for delivery to site, ready for installation.

B. Make exposed joints flush or tight.

C. Provide components required for anchorage to adjacent construction.

D. Frame openings made for penetrating mechanical and electrical components.

E. Fabricate door for sliding operation.

2.08 FINISHES

A. Clean surfaces of rust, scale, grease, and foreign matter prior to finishing.

B. Prime paint items with one coat. Do not prime surfaces in direct contact with concrete or where field welding is required.

C. Galvanizing: In accordance with requirements of ASTM A 123/A 123M.

D. Shop Finished Surfaces: Powder coated black.

PART 3 EXECUTION

3.01 EXAMINATION

A. Verify that field measurements are as indicated on shop drawings.

B. Verify that substrate surfaces and required openings are ready to receive work.

3.02 PREPARATION

A. Clean substrate surfaces.

3.03 INSTALLATION

A. Install in accordance with manufacturer's instructions.

B. Install items plumb and level, accurately fitted, free from distortion or defects.

C. Perform field welding in accordance with AWS D1.1.

D. After installation, touch-up field welds scratched or damaged surfaces with shop applied finish.

3.04 TOLERANCES

A. Maximum Variation From Plumb or Level: 1/4 inch.

B. Maximum Misalignment From True Position: 1/4 inch.

3.05 CLEANING

A. Remove temporary protection to prefinished surfaces.

END OF SECTION