SECTION 10 22 13
WIRE MESH/CHAIN LINK PARTITIONS

PART 1 GENERAL

1.1 RELATED DOCUMENTS
- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 specification section, apply to work of this section.
- B. Section 32 31 13 Chain Link Fencing & Gates

1.2 SECTION INCLUDES
- A. Wire mesh or chain link partitions and systems for walls
- B. Access door/gate

1.3 REFERENCES
- A. ASTM A36/A36M - Standard Specification for Carbon Structural Steel
- B. ASTM A123/A123M – Standard Specification for Zinc (Hot-Dipped Galvanized) Coatings on Iron and Steel Product
- C. ASTM A167 – Standard Specification for Stainless and Heat-Resisting Chromium-Nickel Steel Plate, Sheet and Strip
- D. ASTM A500/A500M – Standard Specification for Cold-formed Welded and Seamless Carbon Steel Structural Tubing in Rounds and Shapes
- E. ASTM A501 – Standard Specification for Hot-formed Welded and Seamless Carbon Steel Structural Tubing
- F. ASTM A510/A510M – Standard Specification for General Requirements for Wire Rods and Course Round Wire, Carbon Steel
- G. ASTM A580/A580M – Standard Specification for Stainless Steel Wire
- H. ASTM A653/A653M – Standard Specification Sheet Steel, Zinc-Coated (Galvanized) by the Hot Dip Process, Structural or Zinc-Iron Alloy-Coated (Galvannealed)
- I. ASTM A794/A794M - Standard Specification for Commercial Steel (CS), Carbon (0.16% Maximum to 0.25% Maximum), Cold Rolled
- J. AWS D1.1 - Structural Welding Code
- K. SSPC (Steel Structures Painting Council) - Painting Manual

1.4 DESIGN REQUIREMENTS
- A. Design partitions 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 clearance of intended openings.
- C. Design partitions to resist the anticipated or potential lateral loads but not less than 10 psf.
- D. Design gates with locking mechanism that allows egress from a partitioned area at any time.
- E. Increase framing sizes for partitions exceeding 12'0" in height.

1.5 SUBMITTALS
- A. Submit under provisions of Section 01 33 00.
- B. Shop Drawings:
  1. Indicate plan and vertical dimensions, elevations, component details; head, jamb, and sill details; location of hardware.
  2. Provide component details, framed openings, bearing, anchorage, loading, welds, type, and location of fasteners, and accessories or items required of related work.
- C. Product Data: Provide data for screen materials and finishes.
  1. Any expanded metal used for partitions must be completely smooth and free of sharp edges.
- D. Samples:
  1. Submit two samples, illustrating screen material.

2. Submit samples of hinge, latch set illustrating style, color, and finish.
3. Incorporate sample into the work.

E. Manufacturer's Installation Instructions: Indicate special procedure, perimeter conditions requiring special attention.

1.6 QUALIFICATIONS

A. Manufacturer:
B. Company specializing in the manufacturing products specified in this section.
C. Minimum 3-years documented experience and complies with the standards of the Woven Wire Products Association.

1.7 FIELD MEASUREMENTS

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

PART 2 PRODUCTS

2.1 MATERIALS

A. Framing Members meeting the requirements of ASTM A36/A36M formed steel sections.
B. Woven Wire Screen: ASTM A510/A510M uncoated crimped steel wires; conforming to the following:
1. Warp and Fill Wire Size: 10-gauge (.135")
2. Mesh Size: Maximum 2 x 2 inch
3. Mesh Weave Design: Plain weave, inter-crimp design, diamond
4. Channel framing: Minimum 1/8" thick
5. Maximum 5'0" panel width
C. Provide welding materials meeting the requirements of AWS D1.1.
D. See Section 32 31 13 Chain Link Fencing & Gates for requirements on galvanized chain link.

2.2 FASTENERS

A. Bolts, Nuts and Washers shall be unfinished, or as recommended by manufacturers.
B. Provide power driven anchorage devices:
C. Exposed Mechanical Fasteners, provide flush, countersunk screws or bolts unobtrusively located and consistent with design of structure with vandal proof heads for exterior side.

2.3 ACCESSORIES

A. Bracing: Provide formed or cold-rolled sheet steel, thickness determined for conditions encountered, and same finish as framing members.
B. Plates, Gussets, Clips: Provide formed sheet steel, thickness determined for conditions encountered, manufacturer's standard shapes, same finish as framing members.
C. Capping Bar: Provide minimum 2" x 1" cold-rolled channel.
D. Main Framing: Provide minimum 1" x ½" x 1/8" cold-rolled on formed channel.
E. Shop and Touch-Up Primer shall be SSPC 15, Type 1, red-oxide.

2.4 DOORS AND HARDWARE

A. Doors: Doors shall be swing type, 3' x 7' unless otherwise noted, bended on all four sides with minimum 1/8" thick steel bar.
B. Hinges: Provide the manufacturer's standard.
C. Latch Sets/Locks: Mortised with cylinder type lock, exterior keyed and interior egress lever.

2.5 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.

2.6 FINISHES

A. Clean surfaces of rust, scale, grease, and foreign matter prior to finishing.
B. Prime the surfaces with one coat, except surfaces where field welding is required.

PART 3 EXECUTION

3.1 EXAMINATION
- A. Verify that substrate surfaces and required openings are ready to receive work.

3.2 PREPARATION
- A. Clean substrate surfaces.

3.3 INSTALLATION
- A. Install in accordance with manufacturer's instructions and approved submittals.
- B. Install items plumb and level, accurately fitted, free from distortion or defects.
  1. Doors/gates shall operate freely without binding
- C. Perform field welding in accordance with AWS D1.1.
- D. After installation, touch-up field welds scratched or damaged surfaces with shop-finish.

3.4 ERECTION TOLERANCES
- A. The maximum variation from plumb or level is 1/4".
- B. The maximum misalignment from True Position is 1/4".

3.5 ADJUSTING
- A. Adjust work under provisions of Section 01 77 00.
- B. Adjust hinged doors/gates to achieve free movement.

3.6 CLEANING
- A. Clean work under provisions of Section 01 77 00.
- B. Remove temporary protection to pre-finished surfaces.

END OF SECTION