

**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 1/2" 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, banded 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