

**SECTION 10 22 13
WIRE MESH PARTITIONS**

SPEC WRITER NOTE: Delete between // // if not applicable to project. Also delete any other item or paragraph not applicable in the section and renumber the paragraphs.

PART 1 - GENERAL

1.1 DESCRIPTION:

- A. This section specifies steel mesh partitions complete with doors, // service windows // and hardware.

1.2 RELATED WORK:

- //A. Sustainable Design Requirements: Section 01 81 13, SUSTAINABLE DESIGN REQUIREMENTS. //
- B. Lock Cylinders Keyed to System: Section 08 71 00, DOOR HARDWARE.

1.3 QUALITY ASSURANCE:

- A. Manufacturer's Qualifications: Manufacturer with three (3) years' experience in providing items of types specified. Submit manufacturer's qualifications.
- B. Obtain wire mesh partitions from single manufacturer.
- C. Installer's Qualifications: Installers who have three (3) years' experience in the installation of units required for this project. Submit installer's qualifications.

1.4 SUBMITTALS:

- A. Submit in accordance with Section 01 33 23, SHOP DRAWINGS, PRODUCT DATA, AND SAMPLES.
- //B. Sustainable Design Submittals, as described below:
- //1. Postconsumer and preconsumer recycled content as specified in PART 2 - PRODUCTS. // //
- C. Shop Drawings: Mesh partitions showing design, construction and materials.
- D. Submit layout drawings with detailed erection drawings and specifications.
- E. Manufacturer's qualifications.
- F. Installer's qualifications.

1.5 WARRANTY:

- A. Construction Warranty: Comply with FAR clause 52.246-21 "Warranty of Construction".

1.6 APPLICABLE PUBLICATIONS:

- A. The publications listed below form a part of this specification to the extent referenced. The publications are referenced in the text by the basic designation also.
- B. ASTM International (ASTM):
- A36/A36M-14.....Carbon Structural Steel
- A53/A53M-12.....Pipe, Steel, Black and Hot-Dipped, Zinc-Coated, Welded and Seamless
- A500/A500M-13.....Cold-Formed Welded Seamless Carbon Steel Structural Tubing in Rounds and Shapes
- A510/A510M-13.....Wire Rods and Coarse Round Wire, Carbon Steel, and Alloy Steel
- A513/A513M-14.....Electric-Resistance-Welded Carbon and Alloy Steel Mechanical Tubing
- A653/A653M-13.....Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process
- A1008/A1008M-13.....Steel, Sheet, Cold-Rolled, Carbon, Structural, High Strength Low Alloy

SPEC WRITER NOTE:

1. Modify this section for partitions more than 3658 mm (12 feet) high, heavy duty use or free standing partitions.
2. Specify galvanized partitions for exterior use, high moisture or corrosive areas.

PART 2 - PRODUCTS**2.1 MATERIALS:**

- A. Steel Wire: ASTM A510/A510M.
- B. Steel Plates, Channels, Angles, and Bars: ASTM A36/A36M.
- C. Steel Sheet: Cold-rolled steel sheet, ASTM A1008/A1008M, Commercial Steel (CS), Type B.
- D. Steel Pipe: ASTM A53/A53M, Schedule 40, unless another weight is indicated or required by structural loads.
- E. Steel Tubing: ASTM A500/A500M, cold-formed structural-steel tubing or ASTM A513, Type 5, mandrel-drawn mechanical tubing.
- F. Metallic-Coated Steel Sheet: ASTM A653/A653M, Commercial Steel (CS), type B; with G60 (Z180) zinc (galvanized) or A60 (ZF180) zinc-iron-alloy (galvannealed) coating designation.

G. Panel-to-Panel Fasteners: Manufacturer's standard steel bolts, nuts, and washers.

//H. Recycled Content of Steel Products: Post consumer plus one-half of preconsumer content not less than // 30 // // // percent. //

2.2 NORMAL DUTY PARTITIONS:

- A. Woven Wire: 38 mm (1-1/2 inch) diamond mesh No. 10 gauge 3.4 mm (0.1345 inch) diameter uncoated steel crimped and woven.
- B. Steel Shapes, Plates and Bars:
1. Vertical Channel: 32 x 16 x 3 mm (1-1/4 x 5/8 x 1/8 inch).
 2. Horizontal Channel: 25 x 16 mm (1 x 5/8 inch).
 3. Center Reinforcing Bar: One (1) 25 x 13 x 3 mm (1 x 1/2 x 1/8 inch) channel with all wires woven through, or two (2) 25 x 10 x 3 mm (1 x 3/8 x 1/8 inch) channels bolted together with mesh in between.
 4. Corner Post: 32 x 32 x 3 mm (1-1/4 x 1-1/4 x 1/8 inch) angle.
 5. Capping Bar: 56 x 25 x 3 mm (2-1/4 x 1 x 1/8 inch) channel or 50 x 6 mm (2 x 1/4 inch) flat bar.
 6. Cast or forged adjustable floor shoes.
- C. Doors // and Service Window //:
1. Hinged Door:
 - a. Frame: 32 x 13 x 3 mm (1-1/4 x 1/2 x 1/8 inch) channel, with a midpoint channel.
 - b. Hardware: 1-1/2 pair butts NRP 101 mm (4 inch). Pick proof mortise type lock, key operated outside, recessed knob inside.
 - c. Miscellaneous: Provide sheet metal baffle at lock, continuous angle stop and flat bar closures.
 2. Sliding Door:
 - a. Frame: 38 x 19 x 3 mm (1-1/2 x 3/4 x 1/8 inch) channels with midpoint channel.
 - b. Hardware: Two door hangers with four roller or ball bearing wheels each hanger, pick proof mortise type lock with a cast receiver and key operated outside recessed knob inside.
 - c. Track: 47 x 58 x 3 mm (1-7/8 x 2-5/16 x 1/8 inch) box shape, provide bottom guide track.
 - d. Miscellaneous: Provide sheet metal baffle at lock and flat bar closures.
- //3. Service Window (Lift Up Sliding Type):
- a. Frame: 25 x 13 x 3 mm (1 x 1/2 x 1/8 inch).

- b. Hardware: Spring latches each side with metal baffles and ratcheted tracks.
 - c. Shelf: Cold rolled steel, 2.7 mm (0.1046 inch) thick by 300 mm (12 inches) deep with rolled edges. //
4. Finish:
- //a. Hot dip galvanized. //
 - //b. Hot dip galvanized and shop primed for field painting. //
 - //c. Shop primed for field painting. //
 - //d. Enamel finish. //
 - //e. Powder coated finish. //

2.3 FABRICATION:

- A. Woven wire clinched to frame, mortise and tenon joints. Frame units to be maximum 1524 mm (5 feet) wide.
- B. Rivet hardware to doors and frames. Bolt sliding door carriers to door.

PART 3 - EXECUTION

3.1 INSTALLATION

- A. Erect the partition in accordance with the manufacturer's shop drawings.
- B. Secure top reinforcing channels with 6 mm (1/4-inch) "U" bolts, 710 mm (28 inches) on center.
- C. Secure vertical posts with 6 mm (1/4 inch) bolts 300 to 380 mm (12 to 15 inches) on center, and anchor verticals to wall 380 mm (15 inches) on center, shim as required.
- D. Provide floor shoes at each post and each corner, adjust to level, anchor to floor with two (2) anchors for each shoe.
- E. Frame penetrations for building structure and mechanical/plumbing, openings with "U" cap terminations. Openings with unfinished wire mesh are not acceptable.

3.2 ACCEPTANCE

- A. Repair or replace damaged parts, touch-up abraded paint with matching paint.
- B. Install partitions level and firm. Adjust hardware to operate smoothly and latch securely.

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