

## SECTION 10605

### WIRE MESH PARTITIONS

#### PART 1 - GENERAL

##### 1.1 SUMMARY

- A. This Section includes the following:
1. Standard-duty wire mesh partitions.

##### 1.2 SUBMITTALS

- A. Product Data for each type of product specified, consisting of manufacturer's specification, technical data, and installation instructions.
- B. Shop Drawings showing fabrication and installation of wire mesh partitions, including plans, elevations, and large-scale details showing anchorage and accessory items. Provide location template drawings for items supported or anchored to permanent construction.
- C. Samples of a 12-by-12-inch (300-by-300-mm) wire mesh panel constructed of specified frame members, wire mesh, and color charts.
- D. LEED Submittal:
1. Credit MR 2.1 and 2.2: Comply with Division 1 Section "Construction Waste Management."
  2. Product Data for Credit MR 4.1 and Credit MR 4.2: For products having recycled content, documentation indicating percentages by weight of postconsumer and preconsumer recycled content.
    - a. Include statement indicating costs for each product having recycled content.
  3. Credit MR 5.1: Product Data indicating location of material manufacturer for regionally manufactured materials.
    - a. Include statement indicating cost and distance from manufacturer to Project for each regionally manufactured material.

#### PART 2 - PRODUCTS

##### 2.1 MANUFACTURERS

- A. Available Manufacturers: Subject to compliance with requirements, manufacturers offering products that may be incorporated in the Work include, but are not limited to, the following:
1. Acorn Wire and Iron Works, Inc.
  2. G-S Company (The).
  3. Hoosier Fence Co., Inc. (The).
  4. Indiana Wire Products, Inc.
  5. Kentucky Metal Products Co.
  6. King Wire Partitions, Inc.

7. Lakeside Wire and Iron Co.
8. Miller Wire Works, Inc.
9. SpaceGuard Products.
10. Wire and Iron Products, Inc.

## 2.2 MATERIALS

- A. Steel Wire: ASTM A 853.
- B. Steel Channels, Angles, Plates, and Bars: ASTM A 36 (ASTM A 36M).
- C. Steel Sheet: ASTM A 568 (ASTM A 568M).
- D. Cold-Rolled Steel Channels: Formed from steel sheet.
- E. Square Steel Tubing: Cold-formed structural steel tubing, ASTM A 500.
- F. Galvanized Steel Wire: ASTM A 641 (ASTM A 641M).
- G. Galvanized Steel Sheet: Commercial-quality, hot-dip-coated steel sheet, ASTM A 653, with G60 or A60 (ASTM A 653M, with Z180 or ZF180) coating.

## 2.3 STANDARD-DUTY MESH PARTITIONS

- A. Mesh: 0.135-inch- (3.4-mm-) diameter, intercrimped steel wire woven into 1-1/2-inch (38-mm) diamond mesh, securely clinched to frame members.
- B. Frames: Provide cutouts for pipes, ducts, beams, and other items shown or necessary for partition installation. Finish edges of cutouts to provide a neat, protective edge.
  1. Vertical Members: 1-1/4-by-5/8-by-0.1046-inch (32-by-16-by-2.7-mm) cold-rolled steel C-Section channels with 1/4-inch- (6-mm-) diameter bolt holes approximately 18 inches (450 mm) o.c.
  2. Horizontal Members: 1-by-1/2-by-1/8-inch (25-by-13-by-3-mm) cold-rolled steel channels, mortised and tenoned to vertical members.
  3. Horizontal Reinforcing Members: 1-by-1/2-by-1/8-inch (25-by-13-by-3-mm) cold-rolled steel channels with wire woven through or two 1-by-1/2-inch (25-by-13-mm) steel channels bolted or riveted toe to toe through mesh, and secured to vertical members. Provide number of horizontal reinforcing members to suit panel height as recommended by partition manufacturer.
- C. Vertical Stiffening Bars: For freestanding partitions 12 feet (3.66 m) in height or over, provide flat steel bar stiffener posts between abutting panel frames. Size as recommended by partition manufacturer for partition height required. Increase size of stiffening bars, if required, to maintain partition rigidity.
- D. Top Capping Bars: 2-1/4-by-1-inch (56-by-25-mm) cold-rolled steel channels, secured to top framing channels with 1/4-inch- (6-mm-) diameter "U" bolts spaced not more than 28 inches (700 mm) o.c.
- E. Corner Posts: 1-1/4-by-1-1/4-by-1/8-inch (32-by-32-by-3-mm) steel angles with floor shoe and 1/4-inch- (6-mm-) diameter bolt holes to align with bolt holes in vertical frame members.

- F. Line Posts: Where partition runs exceed 20 feet (6 m) without intersecting or connecting to overhead framing, furnish 3-inch (75-mm) by 4.1-lb (1.9-kg) steel channel line posts with 5-by-18-by-1/4-inch (125-by-450-by-6-mm) steel base plates located at recommended intervals to ensure partition rigidity and stability.
- G. Intersection Posts: Where 3- or 4-way intersections occur, use 1-1/4-by-1-1/4-inch (32-by-32-mm) tubular steel posts with floor shoe and 1/4-inch- (6-mm-) diameter bolt holes aligned for bolting to adjacent panels.
  - 1. For other than 90-degree intersections, use manufacturer's recommended tubular steel corner posts and installation accessories.
- H. Floor Shoes: Cast metal, sized to suit vertical framing and to provide approximately 3 inches (75 mm) of clear space between finished floor and bottom horizontal frame members. Furnish units with set screws for leveling adjustment.
- I. Sheet Metal Base: Panels of 0.0598-inch- (1.5-mm-) thick steel sheets, welded or bolted to frames.

## 2.4 DOORS

- A. Hinged Door: Door frame of 1-1/4-by-1/2-by-1/8-inch (32-by-13-by-3-mm) steel channels with 1-1/4-by-1/8-inch (32-by-3-mm) flat steel bar cover plates on 3 sides, and 1/8-inch- (3-mm-) thick angle strike bar and cover on lock side. Provide 1-1/2 pairs of 3-by-3-inch (75-by-75-mm) butt hinges riveted or welded to door and frame, and mortise-type cylinder lock operated by key outside with recessed knob inside. Align bottom of door with bottom of adjacent panels.
- B. Provide manufacturer's standard cylinders for lock.
- C. Cylinders for locks are specified in Division 8 Section "Door Hardware."

## 2.5 FABRICATION

- A. Do not use components less than sizes indicated. Use larger-size components as recommended by partition component manufacturer.
- B. Provide bolts, hardware, and accessories for complete installation.
- C. Finish: Manufacturer's standard, shop-applied enamel finish. Provide manufacturer's standard finish color.

## PART 3 - EXECUTION

### 3.1 INSTALLATION

- A. Erect partitions plumb, rigid, properly aligned, and securely fastened in place, complying with Drawings and manufacturer's recommendations.
- B. Provide additional field bracing as shown or necessary for rigid, secure installation. Installer to provide additional clips and bracing as required.

3.2 ADJUSTING AND CLEANING

- A. Adjust moving components for smooth operation without binding.
- B. Touch up damaged finish after completing installation using field-applied paint to match color of shop-applied finish.

END OF SECTION