



SECTION 10 22 13

WIRE MESH PARTITIONS

**** NOTE TO SPECIFIER ** FordLogan woven wire mesh partitions; wire partitions and area guarding.**

This section is based on FordLogan brand guarding products manufactured by SpaceGuard Products, which is located at:

711 S. Commerce Dr.

Seymour, IN 47274

Tel: (812) 523-3044

Fax: (812) 523-3362

Email: sales@spaceguardproducts.com

Web: www.FordLogan.com

SpaceGuard Products is a leading manufacturer of wire partitions and area guarding products including wire mesh storage lockers, pallet rack safety panels, aisle guarding, and mezzanine rail guarding. SpaceGuard Products was formed in 1990 through the consolidation of Logan Wire Company and Ford Fence Company. SpaceGuard combines over 100 years collective experience in advanced manufacturing with unrivaled customer service and field support.

FordLogan woven wire mesh partitions are available in both quick ship standard offerings and custom sizes, and are perfect for a wide array of uses including residential and office tenant storage, machine and robotic guarding, computer security cages in co-location and networking facilities, tool cribs, and warehouse or retail security. All FordLogan products are manufactured in the United States and finished with a factory-applied, durable powder coat.

PART 1 GENERAL

1.1 SUMMARY

**** NOTE TO SPECIFIER ** Delete items below not required for project.**

- A. Standard-Duty Wire Mesh Partitions
- B. Tenant Storage Lockers
- C. Elevator/Lift Enclosure

1.2 RELATED DOCUMENTS

**** NOTE TO SPECIFIER ** Delete any sections below not relevant to this project; add others as required.**

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.
- B. Section 03300 - Cast-In-Place Concrete: Restriction on location and penetration depth of fasteners.

1.3 SUBMITTALS

- A. Submit under provisions of Section 01 30 00.
- B. Product Data: Manufacturer's data sheets on each product to be used, including:
 - 1. Detailed specification of construction and fabrication.
 - 2. Manufacturer's installation instructions.
 - 3. Preparation instructions and recommendations.
 - 4. Storage and handling requirements and recommendations.
- C. Shop Drawings: Indicate dimensions, description of materials and finishes, general construction, specific modifications, component connections, anchorage methods, hardware, and installation procedures, plus the following specific requirements.
 - 1. Provide location template drawings for items supported or anchored to permanent construction.

**** NOTE TO SPECIFIER ** Delete selection samples if colors have already been selected.**

- D. Selection Samples: For each finish product specified, two complete sets of color chips representing manufacturer's full range of available colors and patterns.

1.4 QUALITY ASSURANCE

- A. Installer Qualifications
 - 1. Construct areas designated by Architect.
 - 2. Do not proceed with remaining work until workmanship, color, and sheen are approved by Architect.
 - 3. Repair and correct mock-up area as required to produce acceptable work.
- B. Design Requirements:
 - 1. Design partition system to provide for movement of components without damage, undue stress on fasteners or other detrimental effects, when subject to design loads.
 - 2. Design system to accommodate construction tolerances, deflection of building structural members, and clearances of intended openings.
- C. Source Limitations: Obtain wire mesh items for single source from single manufacturer.

1.5 DELIVERY, STORAGE, AND HANDLING

- A. Store products in manufacturer's unopened packaging until ready for installation.

**** NOTE TO SPECIFIER ** Delete items below not required for project. Wrapping and packaging as detailed below may require additional costs.**

- 1. Materials may ship uncrated per Manufacturer's recommendation in order to

maximize volume on common carrier and to reduce freight cost.

2. Materials to be crated or palletized with cardboard protectors on perimeters of panels and doors and strapped using nylon materials within crating. Crates are non-returnable and the responsibility of the customer for proper disposal.
 3. Posts to be wrapped to provide protection during transit.
- B. Store products in manufacturer's unopened packaging until ready for installation.
 - C. Inventory wire mesh partition door hardware on receipt and provide secure lockup for wire mesh partition door hardware delivered to Project site.
 - D. Keys: Submit keys for door locks to Owner at Substantial Completion of the project. Special lock requests (e.g., master lock or dual cylinder systems) must be specified at time of quotation.

1.6 PROJECT CONDITIONS

- A. Field Measurements: Customer to verify actual dimensions of construction contiguous with wire mesh units by field measurement before fabrication.
- B. Maintain environmental conditions (temperature, humidity, and ventilation) within limits recommended by manufacturer for optimum results. Do not install products under environmental conditions outside manufacturer's absolute limits.

PART 2 PRODUCTS

2.1 MANUFACTURERS

- A. Acceptable Manufacturer: SpaceGuard Products, which is located at: 711 S. Commerce Dr. ; Seymour, IN 47274; Toll Free Tel: 800-841-0680; Tel: 812-523-3044; Email: sales@spaceguardproducts.com Web: www.spaceguardproducts.com
- B. Substitutions: Not permitted.

2.2 MATERIALS

- A. Steel Wire: ASTM A 510 (ASTM A 510M).
- B. Steel Plates, Channels, Angles, and Bars: ASTM A 36/A 36M.
- C. Cold-Rolled Steel Sheet: ASTM A 1008/A 1008M, Commercial Steel (CS), Type B.
- D. Square Steel Tubing: ASTM A 500, cold-formed structural steel tubing.
- E. Panel-to-Panel Fasteners: Manufacturer's standard steel bolts, nuts, and washers.
- F. Postinstalled Expansion Anchors: With capability to sustain, without failure, load imposed within factors of safety indicated, as determined by testing per ASTM E 488, conducted by a qualified independent testing agency.
 1. Carbon steel: Zinc plated to comply with ASTM B 633, Class Fe/Zn 5 (0.005 mm) for Class SC 1 service condition (mild)
 2. For Postinstalled Anchors in Concrete: Capability to sustain, without failure, a load equal to four times the loads imposed.

2.3 PRODUCT

- A. FordLogan Woven Wire Mesh Partitions as manufactured by SpaceGuard Products.
- B. Wire Mesh: #10 W&M Gauge 0.130-inch (3.3 mm), triple crimped bright basic wire 1-1/2 inches (38 mm) diamond mesh pattern.
- C. Horizontal Frames: 1-inch (25 mm) by 1/2-inch (13 mm) - 12-gauge 0.1046-inch (2.657 mm) roll formed channels tenoned at ends. Series of holes for through bolting of top cap bar.
- D. Vertical Frames: 1-1/4 inches (32 mm) by 5/8-inch (16 mm) - 14-gauge 0.0747-inch (1.897 mm) roll formed "C" type channels mortised at ends. Series of slotted holes for securing to adjacent panels and post.
- E. Center reinforcement bar: Two 1 inch (25 mm) by 3/8 inch (9.5 mm) - 12 gauge 0.1046 inch (2.657 mm) roll formed channels riveted together through mesh 42 inches (1067 mm) above finished floor on 7 feet (2134 mm), 8 feet (2438 mm), and 9 feet (2743 mm) high panels. Four channels are used on 10 feet (3048 mm) systems and greater.
- F. Panels: Consisting of the above horizontal and vertical members mortise and tenon at corners with diamond mesh securely clinched to frames. Lower horizontal member located 3.7 inch from bottom of panel to create maintenance sweep space. Center reinforcement bars as noted. Height of walls:

**** NOTE TO SPECIFIER ** Using standard height system heights can significantly reduce price and availability of materials. Delete height(s) not desired.**

- 1. 7'-0" High
- 2. 8'-0" High
- 3. 10'-0" High
- 4. Refer to Drawings
- 5. Other: _____

- G. Flex Panels: Two 8 inches (203 mm) -16-gauge .0598-inch (1.519 mm) hot rolled sheet steel punched and formed. Two 1-1/4 inches (32 mm) by 1-1/4 inches (32 mm) corner angles for bolting to adjacent panels and securing to floor.
- H. Hinge Doors: Constructed of the same materials as panels, with 1-1/4 inches (32 mm) by 1/8 inch (3 mm) flat steel bar cover on sides. Complete with all necessary mounting and locking hardware to install and operate.
 - 1. Jambs: Two 1-1/4 inches (32 mm) by 5/8-inch (16 mm) - 14-gauge 0.0747-inch (1.897 mm) roll formed "C" type channels.
 - 2. Hinges: Three 3 inches (76 mm) by 3 inches (76 mm) butt hinges; welded to door framing and bolted to jamb.

**** NOTE TO SPECIFIER ** Delete lock type not required.**

- 3. Padlock Arrangement: 4-inch (102 mm) by 6-inch (152 mm) cover plate with 1-1/2-inch (38 mm) lug securing into lock opening.
- 4. Cylinder Lock: Mortise type with keyed different cylinder operated by key outside and recessed knob inside.
- I. Slide Doors: Constructed of the same materials as panels, with 1-1/4 inches (32 mm) by 1/8 inch (3 mm) flat steel bar cover on all sides. Complete with all necessary mounting and locking hardware to install and operate.
 - 1. Jambs: Two 1-1/4 inches (32 mm) by 5/8-inch (16 mm) - 14 gauge 0.0747 (1.897 mm) roll formed "C" type channels.

- Hardware: Two 2-wheel trolleys rolling in an enclosed track, 45 inches bottom door guide for each door, and heavy-duty 24 inches (610 mm) lock receiver.

**** NOTE TO SPECIFIER ** Delete lock type not required.**

- Padlock Arrangement: 4-inch (102 mm) by 6-inch (152 mm) cover plate with 1-1/2-inch (38 mm) lug securing into lock opening.
- Cylinder Lock: Mortise type with keyed different cylinder operated by key outside and recessed knob inside.

**** NOTE TO SPECIFIER ** Delete service window if not required.**

- Service Window (slide-up type): 24 inches (610 mm) wide by 21.5-inch-high opening with 24-inch (610 mm) wide by 12-inch (305 mm) deep - 12-gauge 0.1046-inch (2.657 mm) shelf centered in opening. Secured to base with three 1/4 inch (6 mm) by 1 inch (25 mm) flat head screws. Window panel constructed of the same materials as standard panels.
- Corner post (for 90-degree corner): 1-1/4-inch (32 mm) by 1-1/4-inch (32 mm) by 1/8-inch (3 mm) hot rolled angle. With 1-1/4 inch (32 mm) by 3/8 inch (9.5 mm) slotted holes aligning with bolt holes in vertical frames.
- Adjustable Corner post (other than 90 degrees): Four 3 inch (76 mm) by 3 inch (76 mm) butt hinges welded to two 1-1/4 inch (32 mm) by 5/8 inch (16 mm) roll formed "C" type channels with base plates punched to accept 3/8 inch (9.5 mm) diameter anchors. With 5/16-inch (8 mm) bolt holes aligning with bolt holes in vertical frames.
- Line/Stiffener post: 3-1/2 inch by 1-1/4 inch (32 mm) - 10 gauge 0.1345 inch (3.416 mm) with base plates of 4 inches (102 mm) by 7 inch (178 mm) - 10 gauge 0.1345 inch (3.416 mm) flat stock, with four 7/16 inch (11 mm) diameter holes to accept 3/8 inch (9.5 mm) diameter anchors. Recommended usage is every 15 feet (4572 mm) linear feet on 7 feet (2134 mm) and 8 feet (2438 mm) high systems and every 10 feet (3048 mm) linear feet on 9 feet (2743 mm), 10 feet (3048 mm) and 12 feet (3658 mm) high systems.
- Three Way Post: 1-1/4 inch (32 mm) by 1-1/4 inch (32 mm) by 1-1/4 inch (32 mm) U-shaped post with 1-1/4 inch (32 mm) by 2 inch (51 mm) flat stock base plate punched to accept a 3/8 inch (9.5 mm) diameter anchor. All three sides are punched with same hole pattern as vertical frames for bolting to adjacent panels.

**** NOTE TO SPECIFIER ** Delete Top Capping Channel if wire mesh ceilings used**

- Top Capping Channel: 1-1/2-inch (38 mm) by 1/2-inch (13 mm) - 14-gauge 0.0747 (1.897 mm) roll formed channel with holes included for through bolting directly to panel's horizontal frame.
- Base Shoes: 2-inch (51 mm) high Die Cast Aluminum with two holes to accept 1/4-inch (6 mm) diameter anchor for securing to floor; and with setscrew for leveling adjustment.
- Accessories:

**** NOTE TO SPECIFIER ** Delete Sweep Guards if maintenance sweep is required. Sweep Guards are used only to eliminate maintenance sweep for high security requirements.**

- Sweep Guards: 5-7/16-inch (138 mm) by 5/8 inch (16 mm) - 20-gauge 0.0359 inch (0.912 mm) cold-rolled steel; formed at top and bottom; secured with 1-1/4 inch (32 mm) by 1/4-inch (6 mm) hex head bolt and nut to bottom of panel frame; then anchored to finished floor.

**** NOTE TO SPECIFIER ** Delete sheet metal base unless lower level sheet metal wainscot is required for security**

- Sheet Metal Base: 16-gauge .0598-inch (1.519 mm) Hot Rolled Sheet Metal.

**** NOTE TO SPECIFIER ** Delete wall clips if Line Posts are used at wire mesh partition wall ends. Also, wall clips cannot be used in conjunction with Flex Panels at building wall.**

3. Wall Clips: 3/4 inch (19 mm) wide by 1/8 inch (3 mm) thick cold rolled steel; formed and punched for securing to wall.

**** NOTE TO SPECIFIER ** Delete Lines R through U if ceilings not required.**

- R. Ceiling Panels: Fabricated from same mesh, framing and reinforcement bars as panels above; except that horizontal bars are on each end eliminating maintenance sweep space in wall panels.
- S. Ceiling Perimeter Angle: 1-1/2 inch (38 mm) by 1-1/2 inch (38 mm) by 14 gauge 0.0747 (1.897 mm) galvanized angle; punched for bolting to top of wire mesh wall panels and to sides of wire mesh ceiling panels. Attach to existing walls creating a ledge if supporting ceiling at an existing wall.
- T. Ceiling Intermediate Beam Support: 2 inches (51 mm) by 4 inches (102 mm) by 14 gauge .0747 (1.897 mm) rectangular tube for use in spans exceeding 12 feet (3658 mm) in any two directions.
- U. Ceiling Intermediate Beam Support Post: 2 inch (51 mm) by 2 inch (51 mm) - 14 gauge 0.0747 (1.897 mm) square tube with 4 inch (102 mm) by 7 inch (178 mm) by 3/16 inch (5 mm) base plate drilled to accept 3/8 inch (9.5 mm) diameter anchors; a 4 inch (102 mm) by 7 inch (178 mm) by 1/4 inch (6 mm) plate at top for support of beams. Ceiling to rest on, not attach to, support post, if required.
- V. Finish: Minimum two stage phosphate wash with a standard 2 mil (.05 mm) powder coat finish.

**** NOTE TO SPECIFIER ** Delete color(s) not required. All colors other than Gray are subject to upcharge and increased scheduling time.**

1. Color:
 - a. SpaceGuard Gray.
 - b. Wheel Black.
 - c. Leaf Green.
 - d. Signal Blue.
 - e. Zinc Yellow.
 - f. Carmine Red.
 - g. Sky White.

**** NOTE TO SPECIFIER ** Customer responsible for supplying color sample on steel if RAL # not available and accept increased lead time to match color per Manufacturer's powder supplier if selecting "Other" color.**

- h. Other: _____

2.4 FABRICATION

- A. Fabricate assemblies of framed sections; to sizes and profiles required; with framing members fitted, reinforced and braced to suit design requirements.
- B. Fit and assemble in largest practical sections for delivery to Project Site, ready for installation.
- C. Fabricate items with joints tightly fitted and secured.

- D. Grind exposed welds smooth and flush with adjacent finish surface. Ease exposed edges to small uniform radius.
- E. Make exposed joints flush and hairline.
- F. Provide components required for anchorage. Fabricate anchorage and related components of same material and finish as framing members.

2.5 FINISH

- A. Clean surfaces of rust, scale, grease, and foreign matter before finishing. Clean material using a two-stage phosphate wash system immediately prior to finishing.
- B. Prefinished Surfaces: Wire partition manufacturer's polyester powder finishing system.
 - 1. Finish colors of partitions and accessories: Selected by Architect from manufacturer's standard colors.

PART 3 EXECUTION

3.1 EXAMINATION

- A. Verification of Conditions: Examine areas and conditions under which Work is to be performed and identify conditions detrimental to proper or timely completion.
 - 1. Do not proceed until unsatisfactory conditions have been corrected.

3.2 INSTALLATION

- A. Comply with manufacturer's recommendations.
- B. Install partitions and gates plumb and level, accurately fitted, properly aligned, securely fastened, and free from distortion or defects.

**** NOTE TO SPECIFIER ** Delete if not required.**

- 1. Elevator/Lift Equipment Enclosure: Erect partitions enclosing elevator equipment to exclude a 2-inch diameter ball at any location.
- C. Install field bracing as necessary (not furnished by mesh partition manufacturer) to provide rigid, secure installation.

3.3 TOLERANCES

- A. Maximum Variation from Plumb or Level: 1/4 inch (6 mm) in total partition height.
- B. Maximum Misalignment from True Position: 1/4 inch (6 mm).

3.4 ADJUSTING

- A. Adjust moving components for smooth operation without binding.
- B. Adjust locks to provide smooth and secure operation.

3.5 PROTECTION

- A. Protect installed products until completion of project.
- B. Touch-up, repair or replace damaged products before Substantial Completion.

END OF SECTION