



**Manufactured by SpaceGuard Products**

SECTION 10 22 13

WIRE MESH PARTITIONS

**\*\* NOTE TO SPECIFIER \*\* SpaceGuard Products; BeastWire Mesh Guarding; wire mesh partitions; area guarding.**

**This section is based on BeastWire Mesh Guarding products manufactured by SpaceGuard Products, which is located at:**

**711 S. Commerce Dr.**

**Seymour, IN 47274**

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**Web: [www.BeastWireMesh.com](http://www.BeastWireMesh.com)**

**BeastWire Mesh was introduced to the market in 2016, as a prefabricated safety barrier and secure guarding solution that uses interchangeable components to construct wire mesh partitions, security cages, storage lockers, pallet rack safety containment systems, rack and shelving security enclosures, mezzanine guardrail, and many other applications. The use of universal components provides cost-effective and readily available materials that are easier to stage and install than other designs on the market. BeastWire Mesh makes this all possible while still offering the highest quality, most secure/safe system on the market backed by our unrivaled 10-year manufacturer's warranty.**

**SpaceGuard Products is a leading manufacturer of wire partitions and area guarding products including BeastWire Mesh Guarding and FordLogan woven wire partitions. SpaceGuard Products was formed in 1990 through the consolidation of Logan Wire Company and Ford Wire Company. SpaceGuard Products combines over 100 years collective experience in advanced manufacturing with unrivaled customer service and field support.**

**Our wire mesh partitions are available in both standard and custom sizes, in welded, woven and expanded steel mesh, 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 our products are finished with a factory-applied powder coat.**

**PART 1 GENERAL**

**1.1 SECTION INCLUDES**

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

- A. Welded wire mesh partitions
- B. Wire mesh security cages
- C. Wire mesh barrier guarding

## 1.2 RELATED SECTIONS

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

- A. Section 03 30 00 - Cast-In-Place Concrete: Restriction on location and penetration depth of fasteners.

## 1.3 SUBMITTALS

- A. Submit under provisions of Section 01 30 00 – Administrative Requirements.
- 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.
- E. 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).

## 1.4 QUALITY ASSURANCE

- A. Manufacturer Qualifications: Minimum 10-years' experience manufacturing products similar to those specified and who offer a minimum 10-year limited manufacturer's warranty on standard components.
- B. Installer Qualifications: Minimum 2-years' experience installing products similar to those specified, or having completed manufacturer's certified product training.
- C. 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.

## 1.5 DELIVERY, STORAGE, AND HANDLING

- A. Store products in manufacturer's unopened packaging until ready for installation.
- B. Deliver, store and handle products in a dry, weather protected location. Do not store outside or allow getting wet.

1.6 SEQUENCING

- A. Ensure that products of this section are supplied to affected trades in time to prevent interruption of construction progress.

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.BeastWireMesh.com](http://www.BeastWireMesh.com)
- B. Substitutions: Not permitted unless request for substitution made in accordance with provisions of Section 01 60 00 – Product Requirements.

2.2 PRODUCT

**\*\* NOTE TO SPECIFIER \*\* BeastWire Mesh Partitions are truly the toughest system for separating and securing any space. All panels and doors in the system are fully framed for maximum security and stability, particularly over unframed mesh products on the market. The panel frames, posts, and other components are further punched with a universal hole pattern allowing for straight through bolt connections for quick installation while allowing for the fasteners to be protected on the secure side of the partition. Carriage bolt and nut connections further allow for long-term, tamper-resistant security versus screws, hex head bolts, or other fastener types. The system is modular in nature, and the universal design allows panels to be stacked vertically between posts or stood on end. We recommend and offer post extensions for heights over 12 feet, and have successfully built partitions as high as 35 feet in height. While other systems may claim universal posts, BeastWire posts are used for all connection types without the use of self-tap screws to make panel and door connections. BeastWire Mesh Partitions are attractive for high traffic areas as they are finished with a factory applied powder coat.**

- A. Product: BeastWire Mesh Partitions as manufactured by SpaceGuard Products.

**\*\* NOTE TO SPECIFIER \*\* Delete partition elements not required.**

- B. Fabrication:

**\*\* NOTE TO SPECIFIER \*\* Delete wire mesh type not required.**

1. Wire Mesh: #10 W&M Gauge 0.130-inch, bright basic steel wire resistance welded at every intersection in a 2-inch by 2-inch square pattern.
2. Heavy-Duty Wire Mesh: #6 W&M Gauge 0.192-inch, bright basic steel wire resistance welded at every intersection in a 2-inch by 2-inch square pattern.
3. Horizontal Frames: 1-1/4 inch by 1-1/4 inch by 1/8 inch hot rolled angle, with 1-1/4 inches by 7/16-inch slotted holes punched approximately 6-inches O.C. from one end, then every 12-inches O.C. from the first hole. Horizontal frames can range from 6-inch length up to 120 inches.
4. Vertical (Notch) Frames: 1-1/4 inch by 1-1/4 inch by 1/8 inch hot rolled angle, notched at both ends, with 1-1/4 inches by 7/16-inch slotted holes punched approximately 6-inches O.C. from one end, then every 12 inches O.C. from the first hole. Vertical frames can range from 6-inch length up to 60 inches.

**\*\* NOTE TO SPECIFIER \*\* Not applicable for panels constructed of 6 ga welded wire.**

**Delete if not required.**

5. Stiffener Bar: 1/4-inch by 3/4-inch thick hot rolled flat stock, center located and welded to wire mesh and horizontal frames on panels greater than 60 inches in length.
6. Panels: Consisting of the above horizontal and vertical members welded at all corners, with mesh securely welded to frame. Stiffener bars, when required, shall be added at the engineered locations. Standard panels range in 1-foot increments from 1-foot by 1-foot up to 5-feet by 10-feet.

**\*\* NOTE TO SPECIFIER \*\* Flex panels are a good option to make up for odd dimensions or those that are difficult to field verify; however, they are not recommended when a wire mesh ceiling is required as ceiling panels are fixed dimensions. Delete if not required.**

7. Flex Panels: Two 8-inch -16 gauge 0.0598-inch sheet steel formed and punched so that width can be adjusted in 1/2-inch increments.

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

8. Service Window (slide-up type): 24-inch wide by 21-1/2-inch high opening with 22-inch wide by 18-inch deep, #12 W&M Gauge .1046-inch shelf centered in opening. Secured to base with four 1-1/4-inch by 15-inch long brackets secured by 5/16-inch bolts and nuts. Window panel constructed of the same materials as standard panels and has spring bolt latches welded at bottom corners for securing in the open position. Padlock holes are provided in the channel track to prevent window from opening when padlock present.

**\*\* NOTE TO SPECIFIER \*\* Delete hinge doors if not required.**

9. Hinge Doors: Constructed of the same materials as panels with a standard 86-inch clear-height opening. Complete with all necessary mounting and locking hardware to install and operate. Standard door includes a 3-sided lock plate welded to accommodate Cylinder Lock or Padlock Arrangement. Single doors are 3-foot or 4-foot wide, and double (bi-parting) doors are a pair of single doors.
  - a. Pre-hung Hinge Assembly: Three 3-inch by 3-inch butt hinges welded to 3/16-inch by 1-1/4-inch steel flat cut 7-inches shorter than overall door height and drilled to match hole pattern in posts. Hinge assembly can be reversed to accommodate in- or out-swinging doors.
  - b. Door Stop: A bolt on slam angle the full height of the door panel is provided for doors with locks. Two bolt-on angle stops are supplied if paired with a padlock arrangement. Both stop types are punched with slotted holes for adjustment to the post and are reversible for in- or out-swinging doors.

**\*\* NOTE TO SPECIFIER \*\* Delete slide doors if not required.**

10. Slide Doors: Constructed of the same materials as panels. Complete with all necessary mounting and locking hardware to install and operate. Standard door includes a 3-sided lock plate welded to accommodate cylinder lock or padlock arrangement.
  - a. Height: Standard slide door openings are 86", 98", or 122".
  - b. Width: Standard slide door openings are 36", 48", 60", 72", 96", or 120". Door openings greater than 60" are achieved with two gate panels through bolted together with a 1-1/2-inch by 1-1/2-inch by 14 gauge (.0747-inch) galvanized cover angle that bolts to the underside of the two panels.
  - c. Security Overhang: Gate panels provided are equal in width to the overall opening. A 1-1/4-inch by 2-inch by 1-1/4-inch channel punched to match door bolt holes, fastens to the non-lock end of door so that door overlaps post and cannot be opened when in locked position.
  - d. Track/Hangers: Two 4-wheel ball bearing trolleys, per gate panel, rolling in a galvanized heavy box track, with a 45-inch bottom door guide to prevent lift out when in locked position.

**\*\* NOTE TO SPECIFIER \*\* Delete all door hardware options not required.**

11. Door Hardware Options:
  - a. Mortise style cylinder lock, keyed different cylinder on outside, and recessed thumb turn knob on inside.
  - b. Mortise style cylinder lock, keyed alike cylinder on outside, and recessed thumb turn knob on inside.
  - c. Mortise style cylinder lock, interchangeable core cylinder on outside, and recessed thumb turn knob on inside.
  - d. ADA-compliant lock

**\*\* NOTE TO SPECIFIER \*\* If electric strike is required for hinge or slide door, you must also select hardware option a through d. A self-closing device is also highly recommended if using electronic controlled access**

- e. 24 VDC electric strike
  - f. Hydraulic self-closer
  - g. Crash/panic bar emergency exit device for hinge doors
  - h. Padlock hasp
12. Universal connection post: 2-inch by 2-inch by 14 gauge (.0747-inch) square tube with a series of 7/16-inch diameter holes drilled on all four sides to accept hardware to connect panels and doors. Standard posts, ranging from 7-foot, 2-inch to 12-foot, 2-inch in 1-foot increments, are drilled with the first hole 8-inch from the bottom and spaced every 12-inch on center leaving a 2-inch maintenance sweep space below panels and doors. Standard floor connections are made by 2-inch by 7-inch by 1/4-inch steel flat base plate welded to base of post and punched to accept two 3/8-inch diameter anchors.
  13. Growth plates: 1-1/4-inch by 2-inch by 1-1/4-inch by 12-gauge roll formed channel punched with 3/8-inch holes every 12-inches on center to bolt directly to panels and posts for 2-inch spacers in walls and ceilings.

**\*\* NOTE TO SPECIFIER \*\* Delete the following point if the standard 2-inch space below all panels and doors meets your security requirements.**

14. Maintenance sweep filler – Growth plates, from above, bolted below panels to fill the 2-inch sweep space. Slotted perimeter angle provided to minimize space below doors without preventing regular operation.
15. Hardware: 5/16-inch carriage through bolts and nuts for all panel-to-panel, panel/door to post connections. Field bracing, floor, and wall anchors by erector unless otherwise specified.
16. Finish: two stage phosphate wash with a standard 2-mil minimum Powder Coat finish

**\*\* NOTE TO SPECIFIER \*\* Delete color(s) not required. Note that there may be upcharges for colors other than manufacturer's standard Gray or Black.**

17. Color: SpaceGuard Gray.
18. Color: Beast Black.
19. Color: Pure Orange.
20. Color: Signal Blue.
21. Color: Carmine Red.
22. Color: Zinc Yellow
23. Color: Signal White
24. Color: Leaf Green.

**\*\* NOTE TO SPECIFIER \*\* Delete if wire mesh ceilings not required.**

- C. Wire Mesh Ceilings:
  1. Ceiling Panels: Fabricated from same mesh, framing and reinforcement bars as panels above.
  2. Perimeter Angle: 1-1/2-inch by 1-1/2-inch by 14 gauge (.0747-inch) galvanized angle; punched for bolting to top of wire mesh wall panels and to

sides of wire mesh ceiling panels. Material should also be used at existing building walls to support the ceiling in accordance with manufacturer's standard installation procedures.

3. Intermediate Beam Support: 2-inch by 4-inch by 14 gauge (.0747- inch) rectangular tube for use in spans exceeding 10 feet in any two directions. Tube is drilled with 7/16-inch round holes on 12-inch centers to through bolt between panels. When possible, beam supports should line up with and overlap cage posts for maximum support.
4. Intermediate Beam Support Post: 2-inch by 2-inch by 14 gauge (.0747 inch) square tube with 4-inch by 7-inch by 1/4-inch base plate punched to accept four 3/8-inch diameter anchors and an unpunched 4-inch by 7-inch plate at top for support of beams. Post should be positioned directly below the seam between any two adjacent beam supports and where beams end at existing building walls where the cage cannot support it.

### 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 in total partition height.
- B. Maximum Misalignment from True Position: 1/4-inch.

#### 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