**Price Security Perforated Face Grille**

**Division 23 – Heating, Ventilating, and Air Conditioning**

**Section 23 37 13 – Diffusers, Registers, and Grilles**

The following specification is for a defined application. Price would be pleased to assist in developing a specification for your specific need.

**PART 1 – GENERAL**

* 1. **Section includes**:
1. Security Grille with Perforated Face.
	1. **Related Requirements**
2. Section 01 30 00 – Administrative Requirements
3. Section 01 40 00 – Quality Requirements
4. Section 01 60 00 – Product Requirements
5. Section 01 74 21 – Construction/Demolition Waste Management and Disposal
6. Section 01 78 00 – Closeout Submittals
7. Section 01 79 00 – Demonstration and Training
	1. **Reference Standards**
8. All referenced standards and recommended practices in this section pertain to the most recent publication thereof, including all addenda and errata.
9. ASTM D610 – Standard Practice for Evaluating Degree of Rusting on Painted Steel Surfaces
10. ASTM D714 – Test Method for Evaluating Degree of Blistering of Paints
11. ASTM D870 – Standard Practice for Testing Water Resistance of Coatings Using Water Immersion
12. ASTM D1654 – Standard Test Method for Evaluation of Painted or Coated Specimens Subjected to Corrosive Environments
13. ASTM D2794 – Standard Test Method for Resistance of Organic Coatings to the Effects of Rapid Deformation (Impact)
14. ASTM D3363 – Standard Test Method for Film Hardness by Pencil Test

**1.04 Submittals**

1. See Section 01 30 00 – Administrative Requirements for submittal procedures.
2. Product Data: Provide data indicating configuration, general assembly, and materials used in fabrication. Include catalog performance ratings that indicate air flow, and NC designation.
3. Shop Drawings: Indicate configuration, general assembly, and materials used in fabrication.
4. Project Record Documents: Record actual locations of units and control components.
5. Operation and Maintenance Data: Include manufacturer's descriptive literature, operating instructions (if applicable), and maintenance and repair data.
6. Warranty: Submit manufacturer warranty and ensure forms have been completed in Owner's name and registered with manufacturer.
7. Maintenance Materials: Furnish the following for Owner's use in maintenance of project.

**1.06 Quality Assurance**

1. Manufacturer Qualifications: Company specializing in manufacturing the type of products specified in this section, with minimum ten years of documented experience.

**1.07 Warranty**

1. See Section 01 7800 - Closeout Submittals, for additional warranty requirements.
2. Provide 12 month manufacturer warranty from date of shipment of grilles and registers.

**PART 2 – PRODUCTS**

**2.01 Security Grilles with Perforated Face**

1. Basis of Design: Price Industries, Inc.
	1. Security Perforated Face Grille: Model MSPG

**2.02 Security Perforated Face Grille**

1. Description:
	1. Furnish and install Price Model MSPG security perforated face grilles of sizes and mounting types designated by the plans and air distribution schedule.
2. Construction:
	1. The grilles shall be [3/16 inch thick], [10 gauge] or [12 gauge] and be made of (**select one**):
		1. Steel
		2. Aluminum
		3. Stainless Steel
	2. The grille face will have the following perforated pattern (**select one**):
		1. P1 with 5/16 inch diameter holes staggered on 7/16 inch centers
		2. P2 with 3/16 inch diameter holes staggered on 5/16 inch centers
		3. P3 with ¼ inch diameter holes staggered on 3/8 centers
		4. P4 with 7/16 inch diameter holes staggered on 11/16 centers
		5. P5 with 1/8inch diameter holes staggered on 3/16 centers. Accepted by New York State Office of Mental Health. See NYS-OMH Patient safety Standards for Guidelines.
	3. The grille face shall be fastened to a [3/16 inch thick], [10 gauge] or [12 gauge] wall sleeve.
3. Paint Specification:
	1. Paint finish shall be (**select one**):
		1. Baked-on powder coat finish.
			1. The paint film thickness shall be a minimum of 2 mils.
			2. The finish shall have a hardness of 2H as tested in accordance with ASTM D3363.
			3. The finish shall pass an ASTM B117 Corrosive Environment Salt Spray Test for 1000 hours with no measurable creep, rusting or blistering as per ASTM D1654, D610 and D714.
			4. The finish shall pass an ASTM D870 Water Immersion test of a minimum of 500 hours with no measurable with no rusting or blistering as per ASTM D610 and D714.
			5. The finish shall have an impact resistance of 100 inch-pounds in accordance with ASTM D2794.
		2. All components shall have a custom finish in a color to match a customer supplied sample.
		3. All stainless steel components shall be 2B stainless steel.
4. Options (**select all that apply**):
	1. Sleeve Construction (**select one**):
		1. The sleeve shall be stitch welded.
		2. The sleeve shall be continuously welded.
	2. Fastening option (**select one**):
		1. The grille shall be supplied with a 1 x 1 x 3/16 inch steel angle mounting frames.
		2. The grille shall be supplied with a 1-1/2 x 1-1/2 x 3/16 inch steel angle mounting frames.
		3. The grille shall be supplied with a 1 x 1 x 1/8 inch steel angle mounting frames.
		4. The grille shall be supplied with a 1-1/2 x 1-1/2 x 1/8 inch steel angle mounting frames.
		5. 3/4 inch diameter x 3 inch masonry rods.
		6. Countersunk #12 plated steel spanner screws.
		7. Countersunk #12 stainless steel spanner screws.
		8. Countersunk #12 plated steel Torx screws.
		9. Countersunk #12 stainless steel Torx screws.
	3. Damper:
		1. The grille shall be supplied with a front operated opposed blade damper
	4. Barrier bars (**select one**):
		1. The grille shall be supplied with ½ inch diameter hot rolled steel barrier bars
		2. The grille shall be supplied with 3/4 inch diameter hot rolled steel barrier bars
		3. The grille shall be supplied with ½ inch diameter hardened steel barrier bars in sockets
		4. The grille shall be supplied with 3/4 inch diameter hardened steel barrier bars in sockets
		5. The grille shall be supplied with 2 x ¼ inch flat hot rolled steel bars
	5. Wire Mesh:
		1. The grille shall be supplied with 10 gauge 3/8 inch clear opening steel mesh.
	6. Transfer grille:
		1. The grille shall be supplier with a matching welded rear plate.

**PART 3 – EXECUTION**

**3.01 Examination**

1. Verify that conditions are suitable for installation.
2. Verify that field measurements are as shown on the drawings.

**3.02 Installation**

1. Install in accordance with manufacturer’s instructions.
2. See drawings for the size(s) and locations of grilles and registers.

**3.03 Field Quality Control**

1. See Section 01 40 00 – Quality Requirements for additional requirements.

**3.05 Cleaning**

1. See Section 01 74 19 – Construction Waste Management and Disposal for additional requirements.

**3.06 Closeout Activities**

1. See Section 01 78 00 – Closeout Submittals for closeout documentation requirements.
2. See Section 01 79 00 – Demonstration and Training for additional requirements.