**ENGINEERING SPECIFICATION & CONFIGURATION** 

#### 1100, 51100

The perforated face supply diffuser shall be Krueger model 1100 (steel perforated face and backpan) or 51100 (aluminum perforated face and backpan). The diffusers shall have a perforated face with 3/16" diameter holes on 1/4" centers resulting in a 51% free area. The perimeter of the perforated face and backpan shall be an aluminum extrusion resulting in an aesthetic appearance. The diffuser shall have a tapered backpan made up of four individual pieces resulting in a square neck.

The diffuser shall have individually adjustable curved blade deflectors mounted at the neck of the diffuser. The curved blade deflectors shall allow vertical or 1, 2, 3, or 4-way horizontal projection of air into the room. The perforated face must be easily removable from the backpan for access to the adjustable curved blades for adjustments and access to the damper.

Optional opposed-blade damper (OBD) shall be constructed of heavy gage steel. Damper shall be operable from the face of the diffuser.

### PERFORMANCE

The manufacturer shall provide published (printed or electronic) performance data for the diffuser. Performance data shall include 2 - 7 octave band sound power levels. The diffuser shall be tested in accordance to the data standards at the time of product introduction or ANSI/ ASHRAE Standard 70.

#### FINISH

The paint finish shall be #44 British White and be an anodic acrylic paint, baked at 315°F for 30 minutes. The paint thickness shall be 0.8 – 1.0 mils, gloss at 60° per ASTM D523-89 of 50 – 85%, pencil hardness per ASTM D3363-92A of HB – H, crosshatch adhesion per ASTM D3359-83 of 4B – 5B, impact per ASTM D2794-93 of direct impact >100 in/ lb and reverse impact >80 in/lb, salt spray per ASTM B117-9048 of 96 hours, humidity per ASTM D2247-92 of >500 hours and water soak per ASTM D870-92 of 250 hours.

## 1. SERIES: (XXXXX)

1100 - Perforated, Steel Supply Diffuser 51100 - Perforated, Aluminum Supply Diffuser

### 2. PATTERN: (XX)

01 - 1-Way 02 - 2-Way 03 - 3-Way 04 - 4-Way

## 3. WIDTH: (XX) \*

6", 8", 9", 10", 12", 15", or 18"

## 4. HEIGHT: (XX) \*

- IF WIDTH = 6" - Select 6", 9", 12", 15", or 18"
- 8" Select 8"
- 9" Select 9", 12", 15", or 18"
- 10" Select 10"
- 12" Select 12", 15", or 18"
- 15" Select 15" or 18"
- 18" Select 18"

### 5. FRAME: (XXX)

F22 - Surface Mount - Curved F23 - Lay-in T-Bar F27 - Spline

# 6. PANEL: (XX)x(XX)

NONE 12"x12" 12"x24" 24"x24" 24"x48"

### 7. DAMPERS: (XX)

- 00 No Damper
- 01 Steel Opposed Blade Damper (Model OBD)
- 15 Aluminum Opposed Blade Damper (Model 50BD)

#### 8. ACCESSORIES: (XX)

- 00 No Accessories
- S Straightening Grid

# 9. FINISH: (XX)

- 01 Mill
- 03 Black Backpan with British White Face
- 10 Alumican
- 35 Black
- 44 British White
- \* See chart on page C1-102 for available neck sizes.