

## **ENGINEERING SPECIFICATION & CONFIGURATION**

#### 5810

The return grille shall be a Krueger model 5810. This grille must have fixed extruded aluminum blades on 1/4" centers with a minimum thickness of 0.062". The core of the 5810 shall be assembled using mandrel construction. This core must be removable from the frame of the 5810 to allow the core to be flipped or rotated so one core can provide four different blade orientations: 5° up, 5° down, 15° up and 15° down. The frame of the grille must be constructed of extruded aluminum with nominal thickness 0.040 – 0.050". This frame must also produce a border of 1" around all sides of the grille and have a flat edge (Frame F) with mitered corners.

### **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: (XXXX)

5810 - Multi-deflection, removable core, aluminum return grille

## 2. PATTERN: (X) \*

H - Horizontal front blades V - Vertical front blades

### 3. WIDTH: (XX)

6" - 48" in 1/4" increments

#### 4. HEIGHT: (XX)

4" - 48" in 1/4" increments

### 5. FRAME: (XXX)

F00 - Core only F22 - Surface mount

#### 6. FRAME TYPE: (X)

0 - None

F - Flat frame

### 7. FASTENING METHOD: (XX)

00 - No screw holes

01 - Screw holes

## 8. DAMPER: (XX) \*\*

00 - No damper

01 - Steel opposed blade damper (model OBD)

13 - Steel, painted opposed blade damper (POBD)

15 - Aluminum opposed blade damper (model 5OBD)

## 9. ACCESSORIES: (XX) \*\*\*

00 - None

IS - Insect screen

DS - Debris screen

## 10.FINISH: (XX) \*\*\*\*

01 - Mill

10 - Alumican

35 - Black

44 - British White

Maximum grille size is 48x48 with Frame F22. Maximum grille size is 72x24 with Frame F00.

When ordering core only, frame must be (F00). Frame (F00) is only available with frame type (0), fastening method (00), damper (00), and accessories (00).

- \* Pattern 'V' not available with height of 4" or 5".
- \*\* Damper not available with insect or debris screen.
- \*\*\* Insect and debris screen not available with widths greater than 48".

\*\*\*\*Anodized finishes available.