

**ENGINEERING SPECIFICATION & CONFIGURATION**
**AFCS80, AFCS85**

The return grille shall be a Krueger model AFCS80 (3/4" blade spacing) or AFCS85 (1/2" blade spacing). This grille must have curved blades resulting in a fixed deflection of 45° for the AFCS80 or 30° for the AFCS85. The curved blades shall be constructed of no less than 20 gage steel. The blades must be held in place by mullions placed behind the grille and welded to the frame. The frame of the grille must be constructed of no less than 20 gage steel with countersunk screw holes. This frame must also produce a border of 1 1/4" around all sides of the grille with mitered corners.

Optional damper shall be available made of heavy gage steel (OBD) or aluminum (5OBD) and operable from the face of the return grille.

**PERFORMANCE**

The manufacturer shall provide published performance data for the grille. The grille 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: (XXXXXX)**

AFCS80 - Curved blade, 3/4" blade spacing, 45° deflection, steel return grille

AFCS85 - Curved blade, 1/2" blade spacing, 30° deflection, steel return grille

**2. PATTERN: (X)**

H - Horizontal front blades

V - Vertical front blades

**3. WIDTH: (XX) \***

6" - 240" in 1/4" increments

**4. HEIGHT: (XX) \***

4" - 240" in 1/4" increments

**5. FRAME STYLE: (XXX)**

F22 - Surface mount

F23 - Lay-in T-bar

F98 - Narrow-T

FTB - Channel frame \*

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

NONE 24"x24"

24"x12" 48"x24"

**7. FASTENING METHOD: (XX)**

00 - No screw holes

01 - Standard screw holes

02 - Concealed mounting \*\*

03 - Knurled knob ‡

08 - 1/4 turn fasteners ‡

**8. DAMPER: (XX)**

00 - No damper

01 - Steel opposed blade damper (model OBD)

15 - Aluminum opposed blade damper (model 5OBD)

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

00 - No accessories IS - Insect screen, 1/16" mesh ◊

01 - Plaster frame DS - Debris screen, 1/4" mesh ◊

04 - 1" filter frame ◊◊

05 - 2" filter frame ◊◊

**10. FINISH: (XX)**

01 - Mill

10 - Alumican

35 - Black

44 - British White

\* Maximum grille size is 240"x96" or 96"x240".

FTB channel frame not available on grilles larger than 48"x48".

\*\* Concealed mounting not available on grilles larger than 36"x36" or patterns H or V.

‡ Knurled knob and 1/4 turn fasteners only available with filter frame accessories.

◊ Accessories IS and DS available on sizes up to 48"x48".

◊◊ Accessories 04 and 05 available on sizes 8"x8" to 48"x36".

**SAMPLE CONFIGURATION: AFCS80 - V - 24x24 - F22 - 12"x24" - 01 - 01 - 00 - 44**