## ENGINEERING SPECIFICATION \& CONFIGURATION

## EGC5, EGC10, EGC15

The return grille shall be a Krueger model EGC. This grille must have at least a $90 \%$ free area for the following core style: $1 / 2^{\prime \prime} \times 1 / 2^{\prime \prime} \times 1 / 2^{\prime \prime}$ (EGC5), $1^{\prime \prime} \times 1^{\prime \prime} \times 1^{\prime \prime}$ (EGC10), and $1 / 2$ " $\times 1 / 2^{\prime \prime} \times 1$ " (EGC15). The frame of the grille must be constructed of extruded aluminum with a thickness of $0.04^{\prime \prime}-0.05^{\prime \prime}$ and countersunk screw holes. This frame must also produce a border of $11 / 4^{\prime \prime}$ around all sides of the grille with mitered corners that are mechanically staked for rigidity.

## OPTION (STEEL FRAME)

Steel frame shall be constructed of 22 gage roll formed steel to produce a $11 / 4^{\prime \prime}$ border around all sides of the grille with mitered corners that are assembled with full penetration resistance welds with a reinforcing patch for rigidity.

## OPTION (FILTER FRAME)

The return grille shall be a Krueger model EGC5. This grille must have a free area of at least $90 \%$ for the $1 / 2^{\prime \prime} \times 1 / 2^{\prime \prime} \times 1 / 2^{\prime \prime}$ core. The frame of the grille must be constructed of extruded aluminum with a thickness of $0.04^{\prime \prime}-0.05^{\prime \prime}$ and countersunk screw holes. This frame must also produce a border of $11 / 4^{\prime \prime}$ around all sides of the grille with mitered corners that are mechanically staked for rigidity. The grille shall have a filter frame to fit standard $1^{\prime \prime}$ or $2^{\prime \prime}$ filters.

## 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 applied by an anodic electrocoating process. This process shall include washing, rinsing, applying iron phosphate, sealing and rinsing again. While hanging from an anodic hook, the product will then be dipped into a high performance electrocoating dip. Then the product shall be forced air dried and baked to a peak temperature of $350^{\circ} \mathrm{F}$ until cured. The overall process shall result to the following film properties: a film thickness of $0.8-1.0$ mils, gloss at $60^{\circ}$ per ASTM D523-89 of $50-85 \%$, pencil hardness per ASTM D3363-92A of $\mathrm{HB}-\mathrm{H}$, crosshatch adhesion per ASTM D3359-83 of 4B - 5B, impact per ASTM D2794-93 of direct impact $>100 \mathrm{in} / \mathrm{lb}$ and reverse impact $>80 \mathrm{in} / \mathrm{lb}$, 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: ( $X X X X X$ )

EGC5 - 1/2"x1/2"x1/2" aluminum core, egg-crate return grille
EGC10-1"x1"x1" aluminum core, egg-crate return grille
EGC15-1/2"x1/2"x1" aluminum core, egg-crate return grille
2. WIDTH: (XX) *
$6^{\prime \prime}-240^{\prime \prime}$ in $1 / 4^{\prime \prime}$ increments, aluminum
$6^{\prime \prime}-48^{\prime \prime}$ in $1 / 4^{\prime \prime}$ increments, steel
3. HEIGHT: (XX) *
$4^{\prime \prime}-240^{\prime \prime}$ in $1 / 4^{\prime \prime}$ increments, aluminum
$4^{\prime \prime}-48^{\prime \prime}$ in $1 / 4^{\prime \prime}$ increments, steel
4. FRAME STYLE: (XXX)

F22 - Surface mount, aluminum
F23 - Lay-in T-bar, aluminum
F98 - Narrow-T, 24 " $\times 24^{\prime \prime}$ only, aluminum **
S22 - Surface mount, steel frame
S23-Lay-in T-bar, steel frame
5. PANEL: $(X X) x(X X)^{\ddagger}$

NONE 12"x12"
$12^{\prime \prime} \times 24^{\prime \prime} \quad 24^{\prime \prime} \times 24^{\prime \prime}$
$24 " \times 48^{\prime \prime} 48^{\prime \prime} \times 48^{\prime \prime}$
6. FASTENING METHOD: (XX)

00 - No screw holes
01 - Standard screw holes
03 - Knurled knob **
08-1/4 turn fasteners **
7. DAMPER: (XX)

00 - No damper
01 - Steel opposed blade damper (model OBD)
13 - Painted Steel Opposed Blade Damper (model POBD)
15 - Aluminum opposed blade damper (model 5OBD)
8. ACCESSORIES: (XX) (XX)

00 - No damper
01 - Plaster frame
04-1" Filter frame **
05-2" Filter frame **
DS - Debris Screen
IS - Insect Screen
9. FINISH: (XX)

01 - Mill 10 - Alumican
35 - Black 44 - British White

* Max ordered size is $240^{\prime \prime} \times 96$ or $96^{\prime \prime} \times 240^{\prime \prime}$ for aluminum, $48^{\prime \prime} \times 48^{\prime \prime}$ for steel. Units over 48 " $\times 48^{\prime \prime}$ provided in multiple sections. Minimum width for EGC5 is $6^{\prime \prime}$. Minimum width and height for EGC15 is $6^{\prime \prime}$.
** Minimum size is 8 " $x 8^{\prime \prime}$ and maximum size is $48^{\prime \prime} \times 36^{\prime \prime}$. (Only available on EGC5.)
$\ddagger$ Frame S23 only available with panel sizes $24^{\prime \prime} \times 24^{\prime \prime}$ and $24^{\prime \prime} \times 48^{\prime \prime}$.

