

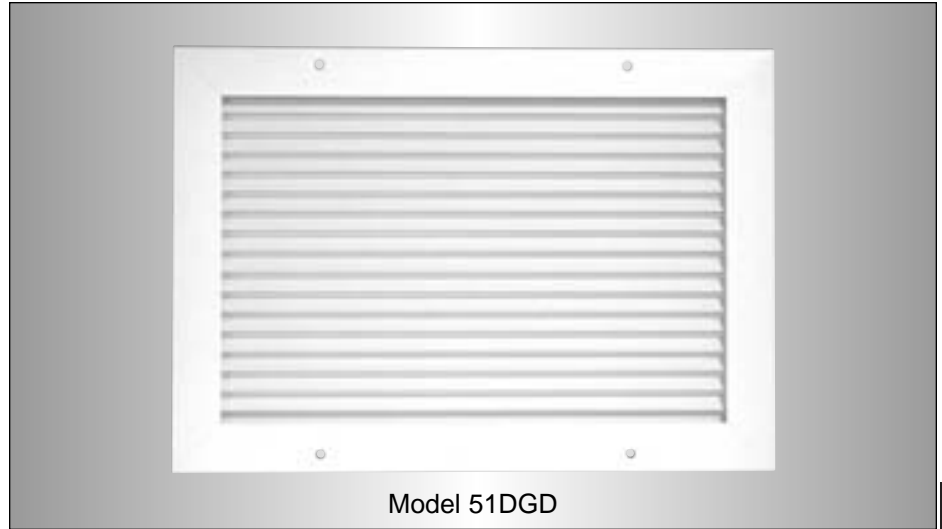
## ALUMINUM DOOR/TRANSFER GRILLES

- SIGHT PROOF

### Models:

**51DGD Double Flange**

**51DGS Single Flange**



The **Nailor Model Series 51DG Door/Transfer Grilles** are designed to meet the demand for top quality and competitive prices. The grilles are carefully constructed to be unobtrusive in appearance for architectural excellence.

Model Series **51DG** offers the largest free area possible (average > 50%) with a completely sight-proof design, utilizing an inverted 'Y' shaped louver on 2/3" (17) centers.

Widely used, not only in doors and partitions, but also in place of conventional exhaust and return grilles where it is important that the interior of the plenum or duct be concealed.

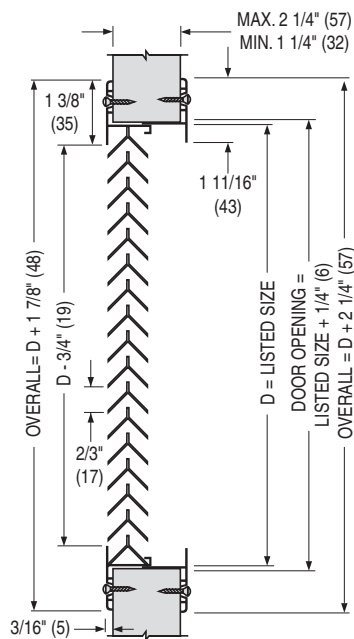
The inverted-Y blades not only block vision, but also provide strength. When mounted in the lower portion of a door, a door grille is naturally subjected to bumps and kicks. The **51DG** durability assures good looks and long service.

Screw holes in the frame are countersunk for smooth appearance after installation.

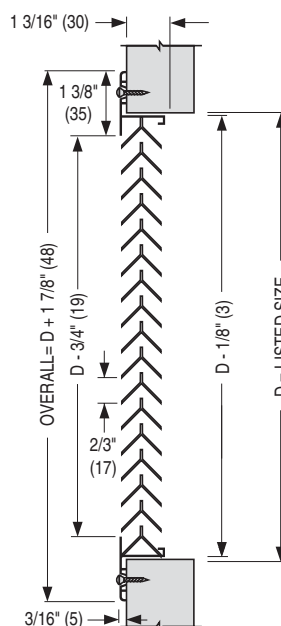
Available sizes 4" x 4" (102 x 102) through 48" x 48" (1219 x 1219) in 2" (51) increments.

**MATERIAL:** Heavy gauge, extruded aluminum.

**FINISH:** AW Appliance White baked enamel finish is standard.  
Other finishes are available.



**Model 51DGD**  
Auxiliary Frame Assembly



**Model 51DGS**  
Flange Frame Assembly

## STEEL DOOR/TRANSFER GRILLES

- SIGHT PROOF

### Models:

**61DGD Double Flange**

**61DGS Single Flange**

**61DGC Core Only**



Models 61DGD, 61DGC

The **Nailor Model Series 61DG Door/Transfer Grilles** are designed to meet the demand for top quality and competitive prices. The grilles are carefully constructed to be unobtrusive in appearance for architectural excellence.

Model Series **61DG** offers the largest free area possible (average > 50%) with a completely sight-proof design, utilizing a 90° inverted 'V' louver on 1/2" (13) centers.

Widely used, not only in doors and partitions, but also in place of conventional exhaust and return grilles where it is important that the interior of the plenum or duct be concealed.

The inverted-V blades not only block vision, but also provide strength. When mounted in the lower portion of a door, a door grille is naturally subjected to bumps and kicks. The **61DG** durability assures good looks and long service.

Screw holes in the frame are countersunk for smooth appearance after installation.

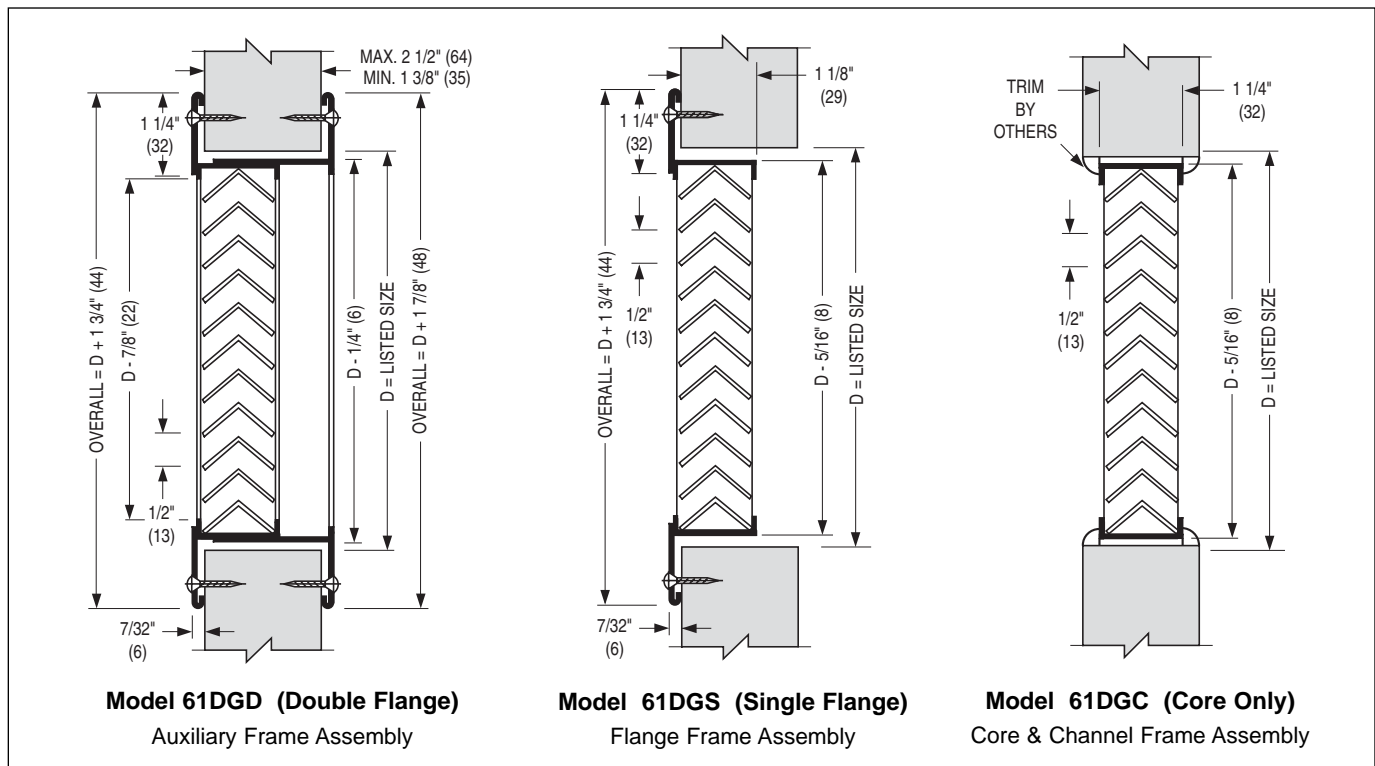
Available sizes 6" x 4" (152 x 102) through 36" x 36" (914 x 914) in 2" (51) increments.

**MATERIAL:** Heavy gauge, corrosion-resistant steel.

**FINISH:** AW Appliance White baked enamel finish is standard.  
Other finishes are available.

G

GRILLES AND REGISTERS

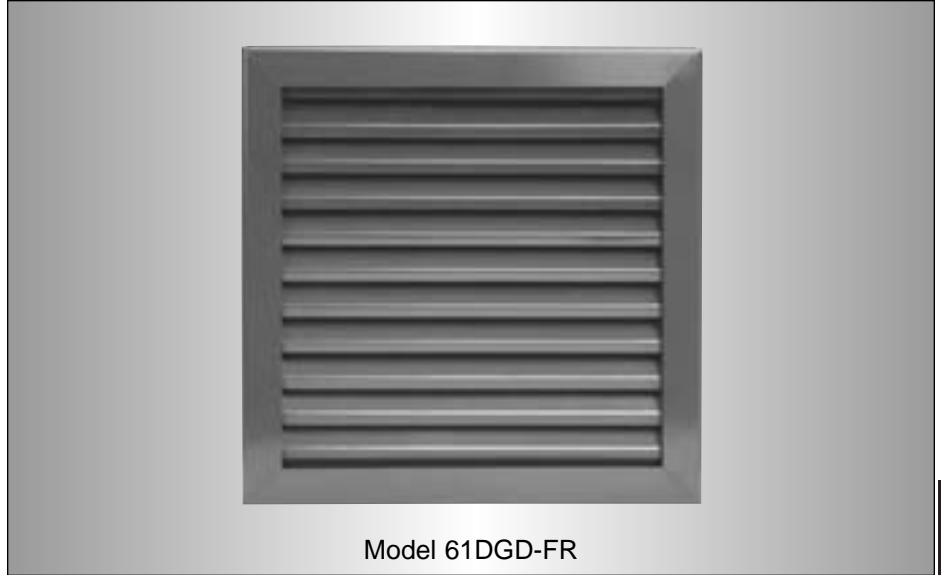


## FIRE RATED DOOR GRILLES

- LOUVERED FACE
- UL LISTED
- SELF ATTACHING AUXILIARY FRAME

Model:

61DGD-FR



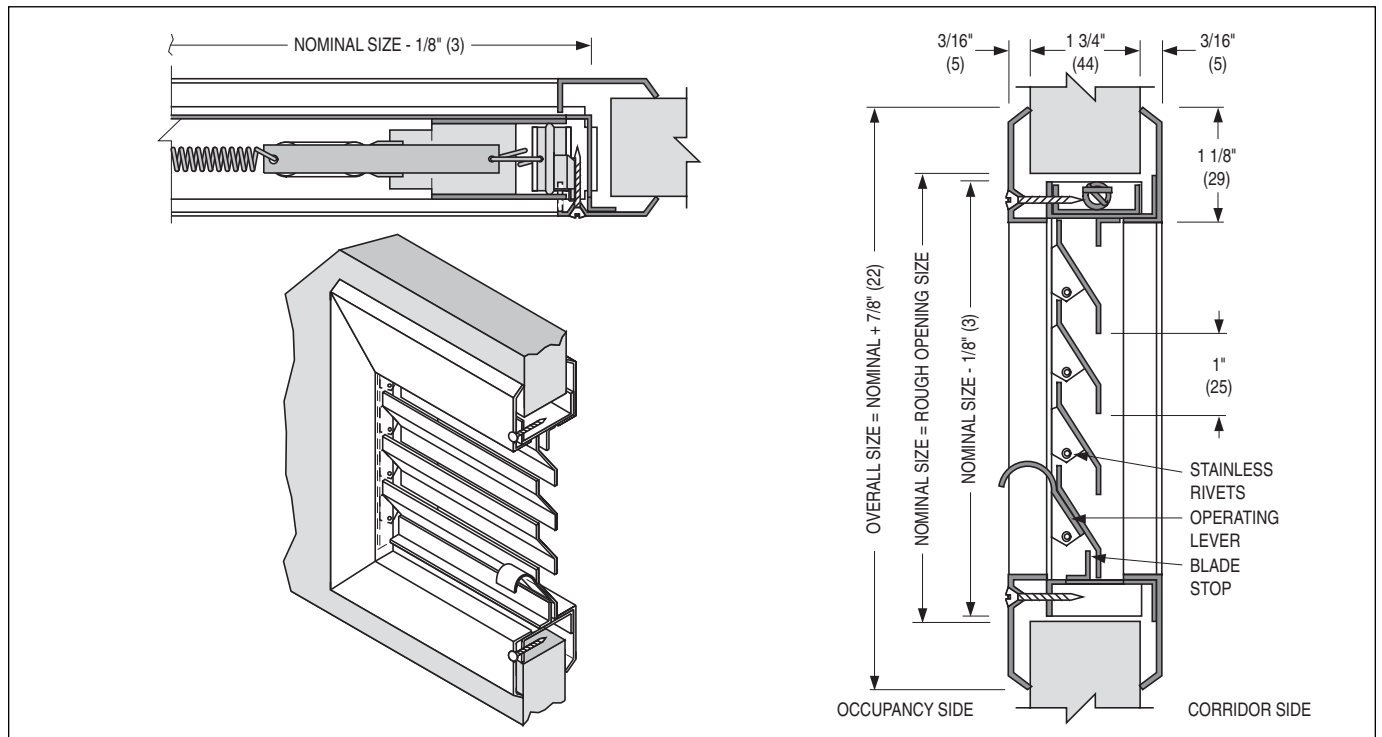
The **Nailor Model Series 61DGD-FR Fire Rated Door Grilles** are listed by Underwriters Laboratories for use in hollow metal and composite type fire doors with up to a 1 1/2 hour rating.

The frame is designed to suit doors that are 1 3/4" (44) thick, and includes a self-attaching auxiliary frame which eliminates the need to drill holes in the door. The 18 gauge formed steel blades are "Z" shaped and are adjustable using the pull operator.

The closing assembly features a 160°F (71° C) UL listed fusible link with stainless steel operating spring and dead lock bar.

### FEATURES:

- Cold rolled steel construction.
- Adjustable 18 gauge blades and a rigid 18 gauge frame.
- 1 1/8" (29) wide face border with a 3/16" (5) beveled edge.
- UL Listed with up to a 1 1/2 hr. rating.
- 160° Fahrenheit (71°C) fusible link.
- Stainless steel operating springs
- BP – Dark Bronze primer finish is standard.
- Available in 2" (51) incremental sizes from 12" x 6" (305 x 152) to 24" x 24" (610 x 610).
- For your convenience, six "Quick Delivery" sizes are available. Contact your Nailor representative for details.



## HOW TO SPECIFY OR TO ORDER

(Show complete Model Number and Size, unless "Default" is desired).

### Aluminum Door/Transfer Grille – Model Series 51DG

**51DG D - 24 x 12 - A - AW**

**MODEL**

- Aluminum Construction      51DG

**FLANGE STYLE**

- Double Flange                      D
- Single Flange                        S

**FINISH**

- Appliance White (default)      AW
- Aluminum                            AL
- Satin Anodized                      SA

**FASTENING**

- Screw Holes (default)            A

**WIDTH x HEIGHT**

inches (mm) x inches (mm)



GRILLES AND REGISTERS

**Notes:**

1. For a standard grille with no special requirements, the "default" will automatically be selected. For example, an aluminum door grille with a double flange, is Model 51DGD. Unit will be supplied with screw holes and AW Appliance White baked enamel finish.

**SUGGESTED SPECIFICATION:**

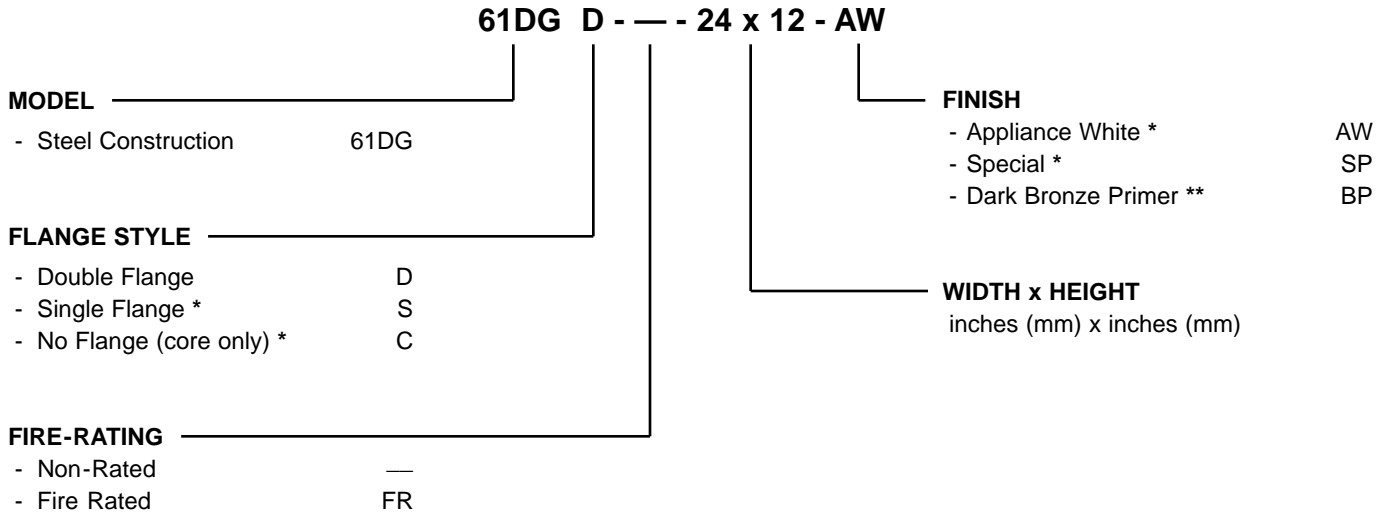
Furnish and install **Nailor Model** (select one) **51DGD** or **51DGS Door/Transfer Grilles** of the type and size as shown on the plans and air distribution schedules. The grille shall have extruded aluminum inverted 'Y' shaped blades and an extruded aluminum frame. The door grille is to be sight-proof. The finish shall be AW Appliance White baked enamel (optional finishes are available).

The manufacturer shall provide published performance data for the grille, which shall be tested in accordance with ANSI/ASHRAE Standard 70 – 1991.

## HOW TO SPECIFY OR TO ORDER

(Show complete Model Number and Size, unless "Default" is desired).

### Steel Door/Transfer Grille – Model Series 61DG



**Notes:**

1. \* Not available on Fire Rated Model.
2. \*\* Only available on Fire Rated Model.

**SUGGESTED SPECIFICATION:**

**61DGD, 61DGS, 61DGC Non-Rated**

Furnish and install **Nailor Model** (select one) **61DGD, 61DGS** or **61DGC Door/Transfer Grilles** of the type and size as shown on the plans and air distribution schedules. The grille shall have corrosion-resistant steel, inverted 'V' shaped blades and frames. The door grille is to be sight-proof. The finish shall be AW Appliance White baked enamel (optional finishes are available).

The manufacturer shall provide published performance data for the grille, which shall be tested in accordance with ANSI/ASHRAE Standard 70 – 1991.

**61DGD-FR Fire Rated**

Furnish and install **Nailor Model 61DGD-FR Fire Rated Door Grilles** of the type and size as shown on the plans and air distribution schedules. The grille shall be UL listed with a fire-rating up to 1 1/2 hours. The finish shall be BP Dark Bronze Primer baked enamel.

## Performance Data

Door/Transfer Grilles • 5100, 6100 Series

Models: 51DG, 61DG

| Nominal Size (inches) | Alternate Size (inches)            | Core Area (sq. ft.) | Ak Factor | Core Velocity VP Neg. SP | 100          | 150          | 200          | 250          | 300          | 350          | 400          | 450          |
|-----------------------|------------------------------------|---------------------|-----------|--------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
|                       |                                    |                     |           |                          | .001<br>.005 | .001<br>.012 | .002<br>.021 | .004<br>.033 | .006<br>.048 | .008<br>.065 | .010<br>.085 | .013<br>.108 |
| 6 x 6                 | 8 x 4<br>10 x 4                    | 0.18                | 0.25      | CFM                      | 18           | 27           | 36           | 45           | 54           | 63           | 72           | 81           |
|                       |                                    |                     |           | NC                       | -            | -            | 13           | 18           | 22           | 25           | 28           | 30           |
| 8 x 6                 | 12 x 4                             | 0.25                | 0.33      | CFM                      | 25           | 38           | 50           | 63           | 75           | 88           | 100          | 113          |
|                       |                                    |                     |           | NC                       | -            | -            | 14           | 19           | 23           | 26           | 29           | 31           |
| 10 x 6                | 16 x 4                             | 0.32                | 0.41      | CFM                      | 32           | 48           | 64           | 80           | 96           | 112          | 128          | 144          |
|                       |                                    |                     |           | NC                       | -            | -            | 15           | 20           | 24           | 27           | 30           | 33           |
| 8 x 8                 |                                    | 0.35                | 0.44      | CFM                      | 35           | 53           | 70           | 88           | 105          | 123          | 140          | 158          |
|                       |                                    |                     |           | NC                       | -            | -            | 15           | 20           | 24           | 27           | 30           | 32           |
| 12 x 6                | 18 x 4                             | 0.40                | 0.50      | CFM                      | 40           | 60           | 80           | 100          | 120          | 140          | 160          | 180          |
|                       |                                    |                     |           | NC                       | -            | 10           | 16           | 21           | 25           | 28           | 31           | 33           |
| 12 x 8                | 16 x 6<br>24 x 4                   | 0.55                | 0.66      | CFM                      | 55           | 83           | 110          | 138          | 165          | 193          | 220          | 248          |
|                       |                                    |                     |           | NC                       | -            | 11           | 17           | 22           | 26           | 29           | 32           | 34           |
| 10 x 10               | 26 x 4                             | 0.58                | 0.69      | CFM                      | 58           | 87           | 116          | 145          | 174          | 203          | 232          | 261          |
|                       |                                    |                     |           | NC                       | -            | 11           | 17           | 22           | 26           | 29           | 32           | 35           |
| 12 x 10               | 16 x 8<br>20 x 6                   | 0.70                | 0.82      | CFM                      | 70           | 105          | 140          | 175          | 210          | 245          | 280          | 315          |
|                       |                                    |                     |           | NC                       | -            | 13           | 19           | 23           | 27           | 30           | 33           | 36           |
| 12 x 12               | 14 x 10 24 x 6<br>18 x 8           | 0.86                | 0.99      | CFM                      | 86           | 129          | 172          | 215          | 258          | 301          | 344          | 387          |
|                       |                                    |                     |           | NC                       | -            | 14           | 20           | 24           | 28           | 31           | 34           | 36           |
| 14 x 14               | 16 x 12 24 x 8<br>20 x 10 34 x 6   | 1.20                | 1.35      | CFM                      | 120          | 180          | 240          | 300          | 420          | 420          | 480          | 540          |
|                       |                                    |                     |           | NC                       | -            | 15           | 21           | 25           | 29           | 32           | 35           | 37           |
| 18 x 12               | 16 x 14 28 x 8<br>22 x 10          | 1.32                | 1.49      | CFM                      | 132          | 198          | 264          | 330          | 396          | 462          | 528          | 594          |
|                       |                                    |                     |           | NC                       | -            | 16           | 22           | 26           | 30           | 33           | 36           | 38           |
| 16 x 16               | 18 x 14 30 x 8<br>22 x 12          | 1.59                | 1.76      | CFM                      | 159          | 239          | 318          | 398          | 477          | 557          | 636          | 716          |
|                       |                                    |                     |           | NC                       | -            | 16           | 22           | 27           | 32           | 34           | 36           | 39           |
| 24 x 12               | 18 x 16 30 x 10<br>20 x 14         | 1.79                | 1.98      | CFM                      | 179          | 269          | 358          | 448          | 537          | 627          | 716          | 806          |
|                       |                                    |                     |           | NC                       | -            | 17           | 23           | 28           | 33           | 35           | 37           | 40           |
| 18 x 18               | 20 x 16 28 x 12<br>24 x 14 32 x 10 | 2.04                | 2.23      | CFM                      | 204          | 306          | 408          | 510          | 612          | 714          | 816          | 918          |
|                       |                                    |                     |           | NC                       | 10           | 18           | 24           | 29           | 34           | 36           | 38           | 41           |
| 30 x 12               | 20 x 18 26 x 14<br>22 x 16 36 x 10 | 2.25                | 2.48      | CFM                      | 225          | 338          | 450          | 563          | 675          | 788          | 900          | 1013         |
|                       |                                    |                     |           | NC                       | 10           | 18           | 24           | 29           | 34           | 36           | 38           | 41           |
| 20 x 20               | 24 x 18 30 x 14<br>26 x 16 36 x 12 | 2.54                | 2.75      | CFM                      | 254          | 381          | 508          | 635          | 762          | 889          | 1016         | 1143         |
|                       |                                    |                     |           | NC                       | 11           | 19           | 25           | 30           | 35           | 37           | 39           | 42           |
| 22 x 22               | 24 x 20 30 x 16<br>26 x 18 36 x 14 | 3.10                | 3.33      | CFM                      | 310          | 465          | 620          | 775          | 930          | 1085         | 1240         | 1395         |
|                       |                                    |                     |           | NC                       | 11           | 19           | 25           | 30           | 35           | 38           | 40           | 43           |
| 30 x 18               | 24 x 22 40 x 14<br>34 x 16         | 3.46                | 3.71      | CFM                      | 346          | 519          | 692          | 865          | 1038         | 1211         | 1384         | 1557         |
|                       |                                    |                     |           | NC                       | 11           | 20           | 26           | 30           | 35           | 38           | 40           | 43           |
| 24 x 24               | 26 x 22 32 x 18<br>28 x 20 36 x 16 | 3.71                | 3.96      | CFM                      | 371          | 557          | 742          | 928          | 1113         | 1299         | 1484         | 1670         |
|                       |                                    |                     |           | NC                       | 11           | 20           | 26           | 30           | 35           | 38           | 41           | 44           |
| 36 x 18               | 32 x 20                            | 4.18                | 4.46      | CFM                      | 418          | 627          | 836          | 1045         | 1254         | 1463         | 1672         | 1881         |
|                       |                                    |                     |           | NC                       | 11           | 20           | 26           | 30           | 35           | 39           | 41           | 44           |
| 26 x 26               | 28 x 24                            | 4.38                | 4.65      | CFM                      | 438          | 657          | 876          | 1095         | 1314         | 1533         | 1752         | 1971         |
|                       |                                    |                     |           | NC                       | 12           | 20           | 27           | 31           | 36           | 39           | 41           | 44           |
| 30 x 24               | 28 x 26 36 x 20                    | 4.68                | 4.95      | CFM                      | 468          | 702          | 936          | 1170         | 1404         | 1638         | 1872         | 2106         |
|                       |                                    |                     |           | NC                       | 12           | 21           | 27           | 31           | 36           | 39           | 41           | 44           |
| 28 x 28               | 30 x 26<br>36 x 22                 | 5.11                | 5.39      | CFM                      | 511          | 767          | 1022         | 1278         | 1533         | 1789         | 2044         | 2300         |
|                       |                                    |                     |           | NC                       | 12           | 21           | 28           | 32           | 37           | 40           | 42           | 45           |
| 36 x 24               | 30 x 28                            | 5.64                | 5.94      | CFM                      | 564          | 846          | 1128         | 1410         | 1692         | 1974         | 2256         | 2538         |
|                       |                                    |                     |           | NC                       | 13           | 22           | 28           | 32           | 37           | 40           | 42           | 45           |
| 30 x 30               | 34 x 26                            | 5.89                | 6.19      | CFM                      | 589          | 884          | 1178         | 1473         | 1767         | 2062         | 2356         | 2651         |
|                       |                                    |                     |           | NC                       | 13           | 22           | 28           | 32           | 37           | 40           | 42           | 45           |

- CFM - cubic feet per minute
  - VP - velocity pressure - inches w.g.
  - Neg. SP - negative static pressure - inches w.g.
  - NC - Noise Criteria values are based on 10 dB room absorption, re 10<sup>-12</sup> watts.
- Core Velocity is in feet per minute.

### Performance Notes:

1. Data derived from tests conducted in accordance with ANSI/ASHRAE Standard 70 – 1991.
2. Ak balancing factors are based on an Alnor velometer with a 2220A or 6070P Jet Probe. Position probe 1" (25) out from face of grille and take the average of several readings at various positions.  
Airflow (CFM) = Average velocity (V<sub>k</sub>) x Ak.