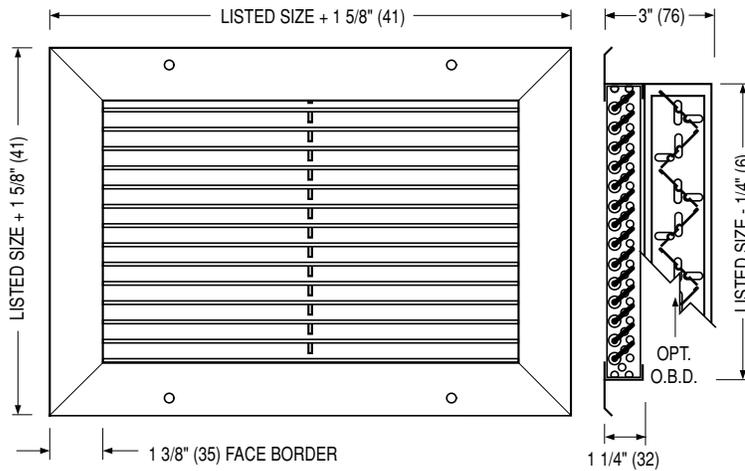


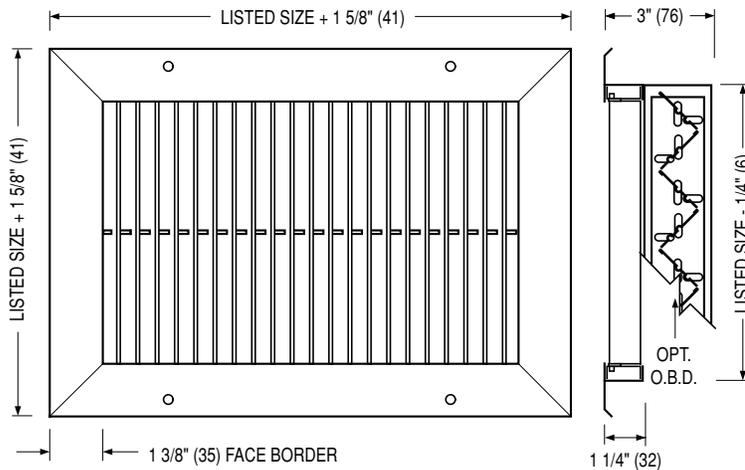


**HEAVY DUTY STAINLESS STEEL RETURN  
GRILLES & REGISTERS • FIXED BLADE  
MODELS: 6755H-HD(-O) AND 6755V-HD(-O)  
TYPE S**



**MODEL 6755H-HD**  
Single Deflection Grille  
Fixed 45° Horizontal Blades

**MODEL 6755H-HD-O**  
Single Deflection Register  
Fixed 45° Horizontal Blades  
(Includes O. B. Damper)



**MODEL 6755V-HD**  
Single Deflection Grille  
Fixed 45° Vertical Blades

**MODEL 6755V-HD-O**  
Single Deflection Register  
Fixed 45° Vertical Blades  
(Includes O. B. Damper)

**DESCRIPTION:**

1. Construction: Type 304 stainless steel welded and reinforced frame features hairline mitered corners. Streamlined shaped grille blades on 1/2" (13) centers are fixed at 45 degrees to match and compliment the supply grilles and registers. Blades are reinforced by an additional support mullion on maximum 8" (203) centers.
2. Optional roll-formed Type 304 stainless steel opposed blade damper.
3. Minimum size is 4" x 4" (102 x 102).  
Maximum size is 60" x 48" (1524 x 1219).
4. Type S Surface mount standard frame has a 1 3/8" (35) face border.
5. Standard fastening is Type A countersunk screw holes.
6. Standard finish is #4 Brushed Satin Polished.

**OPTIONS:**

1. Construction:
  - 316 Type 316 stainless steel.
2. Finish:
  - AW Appliance White.
  - SP Special \_\_\_\_\_.
3.  PFS Stainless Steel Plaster frame
4.  Other \_\_\_\_\_.

**SCHEDULE TYPE:**

**PROJECT:**

**ENGINEER:**

**CONTRACTOR:**

Dimensions are in inches (mm).

**DATE**

**B SERIES**

**SUPERSEDES**

**DRAWING NO.**

5 - 11 - 15

6700

9 - 22 - 11

6700-HD-1

Nailor offers a selection of standard colors and finishes available on our grilles, registers and diffusers. For painted finishes, our state-of-the-art paint systems provide environmentally friendly finishing solutions with uniform coverage and coating thickness. The result is an exceptionally durable finish that resists scratching, corrosion and general wear. Additional facilities for special requirements, as well as a selection of anodized or brushed finishes, complete our ability to provide unmatched beauty and durability for any application.

**NAILOR POWDER COAT PROPERTIES**

|                   |  |
|-------------------|--|
| FILM THICKNESS    | 2.0 to 3.0 mils                                    |
| HARDNESS          | 2 H  |
| IMPACT RESISTANCE | Direct: 160 inch - lbs.<br>Reverse 160 inch - lbs. |
| SALT SPRAY        | 1000 hours   |

**ELECTROCOATING PROPERTIES**

|                   |                |
|-------------------|----------------|
| FILM THICKNESS    | .8 to 1.2 mils |
| HARDNESS          | HB TO H        |
| IMPACT RESISTANCE | 80 inch - lbs  |
| SALT SPRAY        | 100 hours      |


**POWDER COAT**

Nailor's powder coat is a high-tech thermosetting polyester powder coating with superior physical properties that provide excellent color and gloss retention. The finish offers extreme durability and hardness that resists scratching, chipping and general wear. Surface preparation includes degreasing and a chemical cleaning followed by a clean rinse before a final powder coat finish is applied and baked. The environmentally friendly Nailor powder coat system assures uniform coverage and color consistency resulting in a long lasting superior finish. Colors, including simulated anodizing, which is far more economical than color anodizing, can be selected from Nailor's standard color chart or non-standard colors and can be matched from sample chips provided to Nailor.

**ELECTROCOATING**

E-Coat is an environmentally friendly coating that provides complete coverage and a wide range of performance properties, formulated to meet corrosion, durability and other performance specifications. Electrocoating is a highly automated process in which paint is electrically deposited onto a metal foundation. Film build thickness is uniform and overall application efficiencies are in excess of 90%. Paint is consistent on all part-to-part surfaces, preventing sags, runs or drips. E-Coat offers flexibility, better first yield pass and quicker production times compared to other forms of paint applications. Electrocoating is an excellent solution that offers superior properties and uniform finish.

**CLEAR ANODIZING** (Aluminum products only)

Clear anodizing is a clear oxide coating that exemplifies an aluminum surface's natural oxide coating producing a hard, scratch resistant surface that is resistant to general wear and mild chemicals. The process provides a natural looking, virtually maintenance free finish that will endure for many years.

**COLOR ANODIZING** (Aluminum products only)

Color anodizing is an electrolytic process where, after standard anodizing procedures, colored metallic pigments penetrate the oxide surface pores producing a corrosion resistant, colorfast finish. The process results in a natural metallic appearance that requires little maintenance.

**BRUSHED AND CLEAR COAT**

Available on specific aluminum products (consult applicable product page for availability). Surface is brushed to achieve a scratch finish texture before being degreased and chemically cleaned. A clear lacquer coating is then applied to provide a durable protective finish.

**#4 BRUSHED SATIN POLISHED** (Stainless Steel products only)

Surface is polished to ASTM A480 #4 standard to achieve a bright durable finish that is resistant to mild chemicals and corrosion. A final coating is not required due to the inherent anti-corrosion properties of the stainless steel.

**PRIME COAT**

Prime coat provides a stable base for painting in the field. Surface pretreatment includes degreasing and a chemical cleaning before an alkyd prime coat is applied. After a thorough cleaning for dust, etc. that can contaminate the final finish and cause premature flaking or peeling, finish coat should be field applied as soon as possible.

**PAINT PREPARED ALUMINUM** (Aluminum products only)

Allows for field applied paint. Surface preparation includes degreasing and a chemical cleaning followed by a clean rinse. Finish coat should be field applied as soon as possible.

**MILL FINISH**

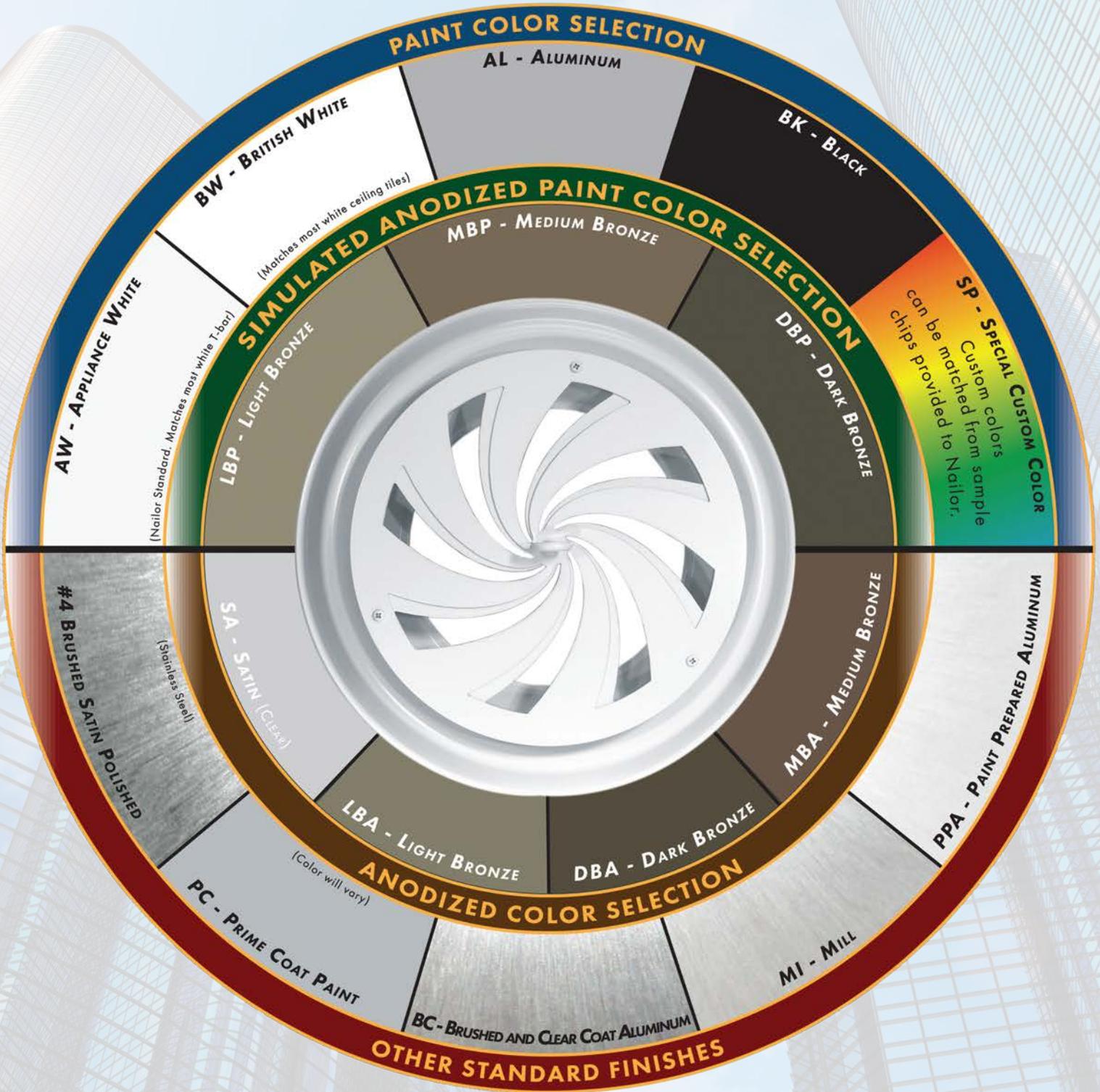
Surface is left untreated and requires cleaning, degreasing, etc. in the field before final finish can be applied if required.



**Nailor**<sup>®</sup>  
Industries Inc.

## STANDARD AND OPTIONAL FINISHES FOR GRILLES AND DIFFUSERS

The following standard colors and finishes are available on applicable Nailor air distribution products. Consult individual product pages for availability



The pictured finishes have been represented as best as possible within printing limitations. However, actual finish may vary. Contact your Nailor representative for a color chip sample on the material specified for a more accurate representation.

**DBK** - Black (for registers ordered with factory mounted dampers) - **BA** - Perforated Diffusers (4300 series only) Appliance White (AW) face with black back pan and pattern controllers.

“Complete Air Control and Distribution Solutions.”

WGDSOF2015

[www.nailor.com](http://www.nailor.com)

## PERFORMANCE DATA:

### STAINLESS STEEL HEAVY DUTY RETURN GRILLES AND REGISTERS • 45° DEFLECTION

#### MODELS: 6755H-HD, 6755V-HD

| Listed Duct Size (inches) | Alternate Sizes (inches)                 | Core Area (sq. ft.) | Ak Factor | Core Velocity<br>Velocity Pressure<br>Neg. Static Pressure | 100          | 200          | 300          | 400          | 500          | 600          | 700          | 800          | 900          | 1000         |
|---------------------------|--|---------------------|-----------|--|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
|                           |  |                     |           |  | .001<br>.005 | .002<br>.021 | .006<br>.046 | .010<br>.082 | .016<br>.129 | .022<br>.185 | .031<br>.252 | .040<br>.330 | .050<br>.417 | .062<br>.515 |
| 6 x 6                     | 8 x 4<br>10 x 4                          | 0.20                | 0.23      | CFM<br>Noise Criteria                                      | 20<br>-      | 40<br>-      | 60<br>-      | 80<br>-      | 100<br>17    | 120<br>22    | 140<br>27    | 160<br>31    | 180<br>35    | 200<br>39    |
| 8 x 6                     | 10 x 5<br>12 x 4                         | 0.28                | 0.30      | CFM<br>Noise Criteria                                      | 28<br>-      | 56<br>-      | 84<br>-      | 112<br>-     | 140<br>18    | 168<br>23    | 196<br>28    | 224<br>32    | 252<br>36    | 280<br>40    |
| 10 x 6                    | 12 x 5<br>16 x 4                         | 0.35                | 0.37      | CFM<br>Noise Criteria                                      | 35<br>-      | 70<br>-      | 105<br>-     | 140<br>-     | 175<br>19    | 210<br>24    | 245<br>29    | 280<br>33    | 315<br>37    | 350<br>41    |
| 8 x 8                     | 14 x 5                                   | 0.38                | 0.40      | CFM<br>Noise Criteria                                      | 38<br>-      | 76<br>-      | 114<br>-     | 152<br>15    | 190<br>20    | 228<br>25    | 266<br>30    | 304<br>34    | 342<br>38    | 380<br>42    |
| 12 x 6                    | 18 x 4                                   | 0.42                | 0.45      | CFM<br>Noise Criteria                                      | 42<br>-      | 84<br>-      | 126<br>-     | 168<br>16    | 210<br>21    | 252<br>26    | 294<br>30    | 336<br>35    | 378<br>39    | 420<br>43    |
| 12 x 8                    | 16 x 6<br>24 x 4                         | 0.58                | 0.59      | CFM<br>Noise Criteria                                      | 58<br>-      | 116<br>-     | 174<br>-     | 232<br>17    | 290<br>22    | 348<br>27    | 406<br>31    | 464<br>36    | 522<br>40    | 580<br>44    |
| 10 x 10                   | 14 x 7<br>26 x 4                         | 0.61                | 0.62      | CFM<br>Noise Criteria                                      | 61<br>-      | 122<br>-     | 183<br>-     | 244<br>17    | 305<br>22    | 366<br>27    | 427<br>32    | 488<br>37    | 549<br>40    | 610<br>44    |
| 18 x 6                    | 14 x 8    30 x 4<br>28 x 4               | 0.65                | 0.67      | CFM<br>Noise Criteria                                      | 65<br>-      | 130<br>-     | 195<br>-     | 260<br>18    | 325<br>23    | 390<br>28    | 455<br>33    | 520<br>37    | 585<br>41    | 650<br>44    |
| 12 x 10                   | 16 x 8    20 x 6<br>24 x 5               | 0.74                | 0.74      | CFM<br>Noise Criteria                                      | 74<br>-      | 148<br>-     | 222<br>-     | 296<br>18    | 370<br>23    | 444<br>28    | 518<br>33    | 592<br>38    | 666<br>42    | 740<br>45    |
| 12 x 12                   | 14 x 10    24 x 6<br>18 x 8    38 x 4    | 0.90                | 0.89      | CFM<br>Noise Criteria                                      | 90<br>-      | 180<br>-     | 270<br>-     | 360<br>19    | 450<br>24    | 540<br>29    | 630<br>34    | 720<br>39    | 810<br>42    | 900<br>45    |
| 14 x 14                   | 16 x 12    24 x 8<br>20 x 10    34 x 6   | 1.24                | 1.22      | CFM<br>Noise Criteria                                      | 124<br>-     | 248<br>-     | 372<br>-     | 496<br>19    | 620<br>24    | 744<br>29    | 868<br>34    | 992<br>39    | 1116<br>43   | 1240<br>46   |
| 18 x 12                   | 16 x 14    28 x 8<br>22 x 10    38 x 6   | 1.37                | 1.34      | CFM<br>Noise Criteria                                      | 137<br>-     | 274<br>-     | 411<br>16    | 548<br>21    | 685<br>26    | 822<br>31    | 959<br>36    | 1096<br>41   | 1233<br>44   | 1370<br>47   |
| 24 x 10                   | 20 x 12    30 x 8                        | 1.52                | 1.49      | CFM<br>Noise Criteria                                      | 152<br>-     | 304<br>-     | 456<br>16    | 608<br>21    | 760<br>26    | 912<br>31    | 1064<br>36   | 1216<br>42   | 1368<br>45   | 1520<br>48   |
| 16 x 16                   | 18 x 14    30 x 8<br>22 x 12             | 1.64                | 1.58      | CFM<br>Noise Criteria                                      | 164<br>-     | 328<br>-     | 492<br>17    | 656<br>22    | 820<br>27    | 984<br>32    | 1148<br>37   | 1312<br>42   | 1476<br>45   | 1640<br>48   |
| 24 x 12                   | 18 x 16    30 x 10<br>20 x 14    36 x 8  | 1.85                | 1.78      | CFM<br>Noise Criteria                                      | 185<br>-     | 370<br>-     | 555<br>17    | 740<br>22    | 925<br>27    | 1110<br>32   | 1295<br>37   | 1480<br>42   | 1665<br>45   | 1850<br>49   |
| 18 x 18                   | 20 x 16    28 x 12<br>24 x 14    32 x 10 | 2.10                | 2.01      | CFM<br>Noise Criteria                                      | 210<br>-     | 420<br>-     | 630<br>17    | 840<br>22    | 1050<br>27   | 1260<br>33   | 1470<br>38   | 1680<br>43   | 1890<br>46   | 2100<br>49   |
| 30 x 12                   | 20 x 18    26 x 14<br>22 x 16    36 x 10 | 2.32                | 2.23      | CFM<br>Noise Criteria                                      | 232<br>-     | 464<br>-     | 696<br>17    | 928<br>23    | 1160<br>28   | 1392<br>33   | 1624<br>38   | 1856<br>43   | 2088<br>46   | 2320<br>50   |
| 20 x 20                   | 24 x 18    30 x 14<br>26 x 16    36 x 12 | 2.61                | 2.48      | CFM<br>Noise Criteria                                      | 261<br>-     | 522<br>-     | 783<br>17    | 1044<br>23   | 1305<br>28   | 1566<br>34   | 1827<br>39   | 2088<br>44   | 2349<br>47   | 2610<br>50   |
| 22 x 22                   | 24 x 20    30 x 16<br>26 x 18    36 x 14 | 3.17                | 3.00      | CFM<br>Noise Criteria                                      | 317<br>-     | 634<br>-     | 951<br>18    | 1268<br>24   | 1585<br>29   | 1902<br>35   | 2219<br>39   | 2536<br>44   | 2853<br>47   | 3170<br>51   |
| 30 x 18                   | 24 x 22    40 x 14<br>34 x 16            | 3.54                | 3.34      | CFM<br>Noise Criteria                                      | 354<br>-     | 708<br>-     | 1062<br>18   | 1416<br>24   | 1770<br>29   | 2124<br>35   | 2478<br>40   | 2832<br>45   | 3186<br>48   | 3540<br>52   |
| 24 x 24                   | 26 x 22    32 x 18<br>28 x 20    36 x 16 | 3.79                | 3.56      | CFM<br>Noise Criteria                                      | 379<br>-     | 758<br>-     | 1137<br>18   | 1516<br>24   | 1895<br>29   | 2274<br>35   | 2653<br>40   | 3032<br>45   | 3411<br>48   | 3790<br>52   |
| 36 x 18                   | 32 x 20    46 x 14<br>40 x 16            | 4.27                | 4.01      | CFM<br>Noise Criteria                                      | 427<br>-     | 854<br>-     | 1281<br>19   | 1708<br>26   | 2135<br>30   | 2562<br>37   | 2989<br>42   | 3416<br>47   | 3843<br>50   | 4270<br>54   |
| 26 x 26                   | 28 x 24    48 x 14                       | 4.47                | 4.19      | CFM<br>Noise Criteria                                      | 447<br>-     | 894<br>-     | 1341<br>19   | 1788<br>26   | 2235<br>31   | 2682<br>37   | 3129<br>42   | 3576<br>47   | 4023<br>50   | 4470<br>54   |
| 30 x 24                   | 28 x 26    36 x 20<br>32 x 22    40 x 18 | 4.77                | 4.46      | CFM<br>Noise Criteria                                      | 477<br>-     | 954<br>-     | 1431<br>20   | 1908<br>27   | 2385<br>32   | 2862<br>38   | 3339<br>43   | 3816<br>47   | 4293<br>51   | 4770<br>55   |
| 28 x 28                   | 30 x 26    40 x 20<br>36 x 22            | 5.20                | 4.85      | CFM<br>Noise Criteria                                      | 520<br>-     | 1040<br>-    | 1560<br>20   | 2080<br>27   | 2600<br>32   | 3120<br>38   | 3640<br>43   | 4160<br>48   | 4680<br>51   | 5200<br>55   |
| 36 x 24                   | 30 x 28    44 x 20<br>40 x 22            | 5.74                | 5.35      | CFM<br>Noise Criteria                                      | 574<br>-     | 1148<br>-    | 1722<br>20   | 2296<br>27   | 2870<br>33   | 3444<br>39   | 4018<br>43   | 4592<br>48   | 5166<br>52   | 5740<br>56   |
| 30 x 30                   | 34 x 26    48 x 20<br>38 x 24            | 5.99                | 5.57      | CFM<br>Noise Criteria                                      | 599<br>-     | 1198<br>-    | 1797<br>20   | 2396<br>27   | 2995<br>33   | 3594<br>39   | 4193<br>44   | 4792<br>48   | 5391<br>52   | 5990<br>56   |

For performance data notes, see F165.

## PERFORMANCE DATA:

### STAINLESS STEEL HEAVY DUTY RETURN GRILLES AND REGISTERS • 45° DEFLECTION

#### MODELS: 6755H-HD, 6755V-HD

| Listed Duct Size (inches) | Alternate Sizes (inches)           | Core Area (sq. ft.) | Ak Factor | Core Velocity<br>Velocity Pressure<br>Neg. Static Pressure | 100          | 200          | 300          | 400          | 500          | 600          | 700          | 800          | 900          | 1000         |
|---------------------------|------------------------------------|---------------------|-----------|--|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
|                           |                                    |                     |           |  | .001<br>.005 | .002<br>.019 | .006<br>.042 | .010<br>.075 | .016<br>.117 | .022<br>.169 | .031<br>.230 | .040<br>.300 | .050<br>.380 | .062<br>.469 |
| 32 x 32                   | 36 x 30 46 x 22<br>38 x 28         | 6.84                | 6.34      | CFM  | 684          | 1368         | 2052         | 2736         | 3420         | 4104         | 4788         | 5472         | 6156         | 6840         |
|                           |                                    |                     |           | Noise Criteria   | -            | 16           | 21           | 28           | 34           | 40           | 44           | 49           | 53           | 57           |
| 48 x 24                   | 34 x 34 38 x 30<br>36 x 32 48 x 28 | 7.69                | 7.13      | CFM  | 769          | 1538         | 2307         | 3076         | 3845         | 4614         | 5383         | 6152         | 6921         | 7690         |
|                           |                                    |                     |           | Noise Criteria   | -            | 17           | 22           | 28           | 34           | 40           | 45           | 49           | 53           | 57           |
| 36 x 36                   | 38 x 34 46 x 28<br>42 x 30 48 x 26 | 8.69                | 8.02      | CFM  | 869          | 1738         | 2607         | 3476         | 4345         | 5214         | 6083         | 6952         | 7821         | 8690         |
|                           |                                    |                     |           | Noise Criteria   | -            | 18           | 22           | 29           | 34           | 41           | 46           | 50           | 54           | 58           |
| 38 x 38                   | 42 x 34 48 x 30<br>44 x 34         | 9.70                | 8.94      | CFM  | 970          | 1940         | 2910         | 3880         | 4850         | 5820         | 6790         | 7760         | 8730         | 9700         |
|                           |                                    |                     |           | Noise Criteria   | -            | 19           | 23           | 29           | 35           | 41           | 46           | 50           | 54           | 58           |
| 40 x 40                   | 42 x 36 48 x 32<br>46 x 34         | 10.77               | 9.90      | CFM  | 1077         | 2154         | 3231         | 4308         | 5385         | 6462         | 7539         | 8616         | 9693         | 10770        |
|                           |                                    |                     |           | Noise Criteria   | -            | 19           | 24           | 30           | 36           | 42           | 48           | 51           | 56           | 60           |
| 42 x 42                   | 44 x 40 48 x 36<br>46 x 38         | 11.89               | 10.92     | CFM  | 1189         | 2378         | 3567         | 4756         | 5945         | 7134         | 8323         | 9512         | 10701        | 11890        |
|                           |                                    |                     |           | Noise Criteria   | 15           | 20           | 25           | 31           | 37           | 43           | 48           | 52           | 56           | 60           |
| 44 x 44                   | 46 x 42                            | 13.07               | 11.98     | CFM  | 1307         | 2614         | 3921         | 5228         | 6535         | 7842         | 9149         | 10456        | 11763        | 13070        |
|                           |                                    |                     |           | Noise Criteria   | 15           | 20           | 25           | 31           | 37           | 43           | 48           | 52           | 56           | 60           |
| 46 x 46                   |                                    | 14.30               | 13.10     | CFM  | 1430         | 2860         | 4290         | 5720         | 7150         | 8580         | 10010        | 11440        | 12870        | 14300        |
|                           |                                    |                     |           | Noise Criteria   | 16           | 21           | 26           | 32           | 38           | 44           | 49           | 53           | 57           | 61           |
| 48 x 48                   |                                    | 15.59               | 14.26     | CFM  | 1559         | 3118         | 4677         | 6236         | 7795         | 9354         | 10913        | 12472        | 14031        | 15590        |
|                           |                                    |                     |           | Noise Criteria   | 16           | 21           | 26           | 32           | 38           | 44           | 49           | 53           | 57           | 61           |

#### Performance Notes:

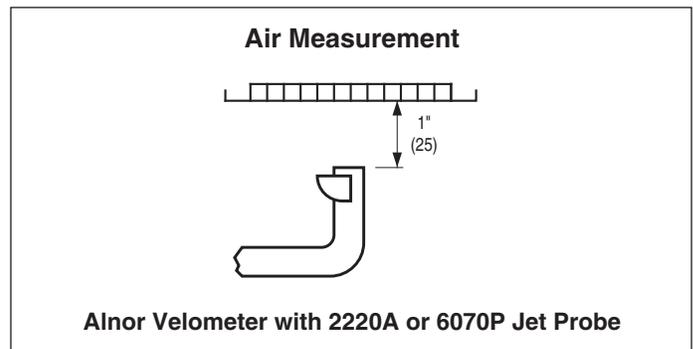
1. All pressures are in inches w.g..
2. Core Velocity is in feet per minute.
3. Performance data is for grille with opposed blade damper. Apply the following correction factors for grille without damper.

**Neg. Static Pressure** Listed Value x 0.91.

**Noise Criteria** Listed value - 4.

4. Noise Criteria (NC) values are based upon 10dB room absorption, re 10<sup>-12</sup> watts. Dash (-) in space indicates an Noise Criteria of less than 15.

5. Data derived from tests conducted in accordance with ANSI/ASHRAE Standard 70 - 2023.



#### Airflow Measurements

1. Balancing factors are applicable with or without dampers, providing uniform airflow exists into grille or register.
  2. Take velocity readings at a number of locations on the inlet face (a minimum of 4), while positioning probe as shown above, one inch out from the face.
  3. Total the various velocity readings and divide by the number of readings taken to arrive at an average inlet velocity (Vk in FPM).
  4. Calculate the airflow (CFM) by multiplying the average velocity by the appropriate Ak factor.
- Airflow (CFM) = Average velocity (Vk) x Ak.