

## PERFORMANCE NOTES FOR SUPPLY GRILLES AND REGISTERS: AIRFOIL BLADE 7100 SERIES

### Throw, Spread and Drop

The isovel diagrams shown below, illustrate in plan view, the relationship of horizontal spread to throw for three standard vertical blade deflections and represent a typical high side wall supply outlet. The isovels (throw values) are for the cataloged terminal velocities of 150, 100 and 50 fpm.

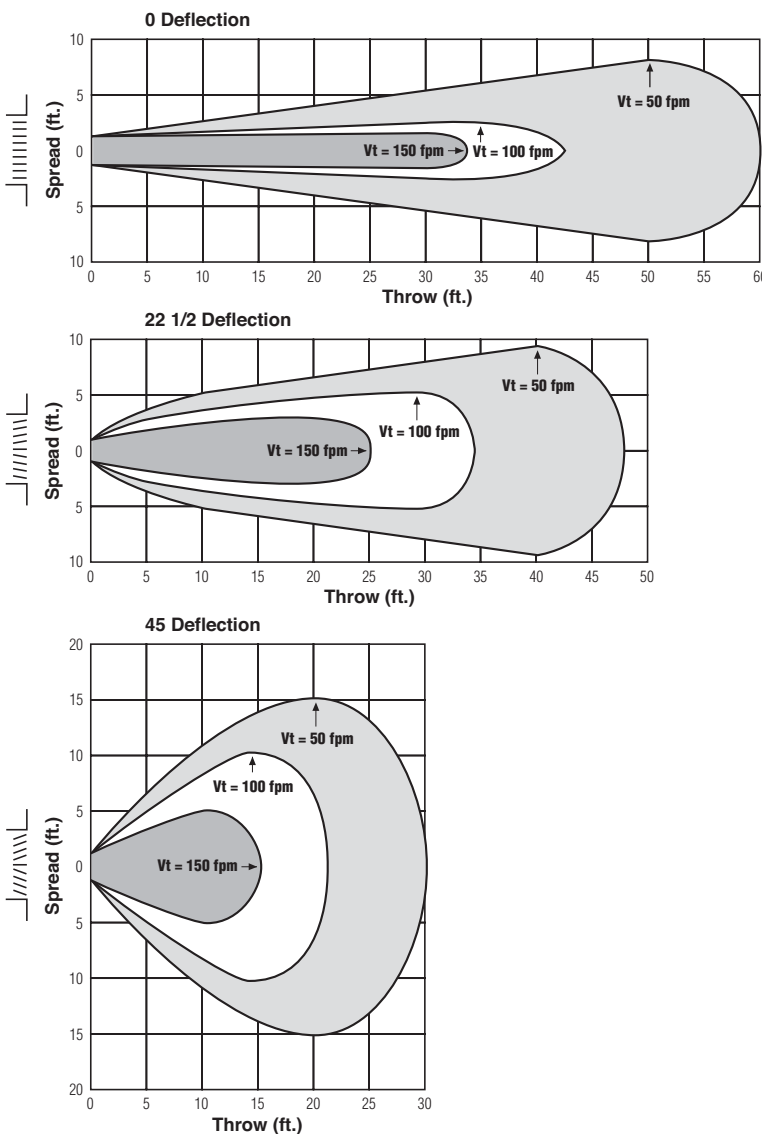
Cataloged data, in accordance with the test code, is with the grille mounted 9" (229) below the ceiling and benefiting from the ceiling coanda effect under isothermal conditions. Throw values without ceiling effect (greater than 24" (610) from a surface parallel to the airflow) may be approximated by multiplying the cataloged throw by x 0.7.

In order to offset potential draft problems caused by premature drop, it is recommended to set the blades with an upward deflection setting of 15 – 20° in free space conditions. The angle of spread and temperature differential between the supply air and room air ( $\Delta T$ ) also effects the drop of the airstream.

Under constant conditions of temperature, volume and core velocity, the wider the spread, the smaller the drop. Typical cold supply air (20°F  $\Delta T$ ) reduces horizontal throw by approximately 30%. Warm air will increase throw by approximately 30% and reduce drop.

For a full explanation of the effects of spread, throw, temperature and drop, refer to the engineering guide at the back of the catalog.

### SPREAD CHARACTERISTICS WITH THREE DEFLECTION SETTINGS



### NC Corrections for Blade Deflection (add)

| Model Type        | Damper  | Blade Deflection |         |     |
|-------------------|---------|------------------|---------|-----|
|                   |         | 0°               | 22 1/2° | 45° |
| Double Deflection | With    | 0                | + 2     | + 7 |
|                   | Without | - 4              | - 2     | + 3 |
| Single Deflection | With    | - 4              | - 1     | + 4 |
|                   | Without | - 8              | - 6     | + 1 |

Note: Damper corrections are for wide open damper.

### TP Correction Factors for Grilles Without Damper (multiply)

| Blade Deflection         | 0°    | 22 1/2° | 45°   |
|--------------------------|-------|---------|-------|
| Double Deflection Factor | x .73 | x .76   | x .84 |
| Single Deflection Factor | x .66 | x .70   | x .80 |

### NC Corrections for Throttling Damper (add)

| Additional Pressure Drop (in. w.g.) | .05" | .15" | .25" |
|-------------------------------------|------|------|------|
| Approx. Damper Opening              | 75%  | 67%  | 50%  |
| NC add                              | + 6  | + 11 | + 18 |

## PERFORMANCE DATA: SUPPLY GRILLES AND REGISTERS • AIRFOIL BLADE 7100 SERIES MODELS: 71DV, 71DH, 71SV, 71SH

| Listed Duct Size (inches) | Alternate Sizes (inches)              | Core Area (sq. ft.) | Ak Factor | Core Velocity Velocity Pressure |          | 300      | 400      | 500      | 600      | 700      | 800      | 1000     | 1200     | 1400     |
|---------------------------|---------------------------------------|---------------------|-----------|---------------------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
|                           |                                       |                     |           | 0°                              | 22 1/2°  | .006     | .010     | .016     | .022     | .031     | .040     | .062     | .090     | .122     |
| 6 x 6                     | 8 x 4<br>10 x 4                       | 0.20                |           | CFM                             |          | 60       | 80       | 100      | 120      | 140      | 160      | 200      | 240      | 280      |
|                           |                                       |                     |           | Noise Criteria                  |          | —        | —        | —        | —        | 16       | 20       | 26       | 32       | 37       |
|                           |                                       |                     |           | Throw                           | 0°       | 5-7-13   | 7-9-16   | 8-12-18  | 10-14-20 | 11-15-21 | 12-16-23 | 15-18-25 | 16-20-27 | 17-21-30 |
| 22 1/2°                   | 4-6-10                                | 6-7-13              | 6-10-14   |                                 | 8-11-16  | 9-12-17  | 10-13-18 | 12-14-20 | 13-16-22 | 14-17-24 |          |          |          |          |
| 8 x 6                     | 10 x 5<br>12 x 4                      | 0.27                |           | CFM                             |          | 81       | 108      | 135      | 162      | 189      | 216      | 270      | 324      | 378      |
|                           |                                       |                     |           | Noise Criteria                  |          | —        | —        | —        | —        | 17       | 21       | 27       | 33       | 38       |
|                           |                                       |                     |           | Throw                           | 0°       | 5-8-15   | 8-12-18  | 10-14-20 | 11-16-23 | 13-18-25 | 15-19-27 | 17-21-30 | 18-23-32 | 19-24-35 |
| 22 1/2°                   | 4-6-12                                | 6-10-14             | 8-11-16   |                                 | 9-13-18  | 10-14-20 | 12-15-22 | 14-17-24 | 14-18-26 | 15-19-28 |          |          |          |          |
| 10 x 6                    | 12 x 5<br>16 x 4                      | 0.35                |           | CFM                             |          | 105      | 140      | 175      | 210      | 245      | 280      | 350      | 420      | 490      |
|                           |                                       |                     |           | Noise Criteria                  |          | —        | —        | —        | —        | 18       | 22       | 28       | 34       | 39       |
|                           |                                       |                     |           | Throw                           | 0°       | 6-9-18   | 9-13-21  | 10-16-24 | 12-19-26 | 15-20-28 | 17-21-30 | 20-23-33 | 21-25-36 | 22-27-39 |
| 22 1/2°                   | 5-7-14                                | 7-10-17             | 8-13-19   |                                 | 10-15-21 | 12-16-22 | 14-17-24 | 16-18-26 | 17-20-29 | 18-22-31 |          |          |          |          |
| 8 x 8                     | 14 x 5                                | 0.38                |           | CFM                             |          | 114      | 152      | 190      | 228      | 266      | 304      | 380      | 456      | 532      |
|                           |                                       |                     |           | Noise Criteria                  |          | —        | —        | —        | —        | 19       | 23       | 29       | 35       | 40       |
|                           |                                       |                     |           | Throw                           | 0°       | 6-9-19   | 9-14-22  | 11-16-25 | 13-19-27 | 16-21-29 | 18-22-32 | 19-24-34 | 21-26-37 | 23-28-40 |
| 22 1/2°                   | 5-7-15                                | 7-11-18             | 9-13-20   |                                 | 10-15-22 | 13-17-23 | 14-18-26 | 15-19-27 | 17-21-30 | 18-22-32 |          |          |          |          |
| 12 x 6                    | 18 x 4                                | 0.42                |           | CFM                             |          | 126      | 168      | 210      | 252      | 294      | 336      | 420      | 504      | 588      |
|                           |                                       |                     |           | Noise Criteria                  |          | —        | —        | —        | —        | 19       | 23       | 29       | 35       | 40       |
|                           |                                       |                     |           | Throw                           | 0°       | 6-9-19   | 9-14-22  | 11-16-25 | 13-19-27 | 16-21-30 | 18-22-32 | 19-24-34 | 21-28-38 | 23-29-41 |
| 22 1/2°                   | 5-7-15                                | 7-11-18             | 9-13-20   |                                 | 10-15-22 | 13-17-24 | 14-18-26 | 15-19-27 | 17-22-30 | 18-23-33 |          |          |          |          |
| 14 x 6                    | 10 x 8                                | 0.50                |           | CFM                             |          | 150      | 200      | 250      | 300      | 350      | 400      | 500      | 600      | 700      |
|                           |                                       |                     |           | Noise Criteria                  |          | —        | —        | —        | 15       | 20       | 24       | 30       | 36       | 41       |
|                           |                                       |                     |           | Throw                           | 0°       | 6-11-20  | 10-15-23 | 12-18-25 | 15-20-28 | 16-22-31 | 19-23-33 | 21-25-36 | 23-28-40 | 25-31-43 |
| 22 1/2°                   | 5-9-16                                | 8-12-18             | 10-14-20  |                                 | 12-16-22 | 13-18-25 | 15-18-26 | 17-20-29 | 18-22-32 | 20-25-34 |          |          |          |          |
| 12 x 8                    | 16 x 6<br>24 x 4                      | 0.58                |           | CFM                             |          | 174      | 232      | 290      | 348      | 406      | 464      | 580      | 696      | 812      |
|                           |                                       |                     |           | Noise Criteria                  |          | —        | —        | —        | 16       | 21       | 25       | 31       | 37       | 42       |
|                           |                                       |                     |           | Throw                           | 0°       | 7-11-21  | 10-15-24 | 12-19-27 | 15-21-30 | 17-23-32 | 20-24-34 | 22-27-38 | 24-30-42 | 26-32-45 |
| 22 1/2°                   | 6-9-17                                | 8-12-19             | 10-15-22  |                                 | 12-17-24 | 14-18-26 | 16-19-27 | 18-22-30 | 19-24-34 | 21-26-36 |          |          |          |          |
| 10 x 10                   | 14 x 7<br>26 x 4                      | 0.61                |           | CFM                             |          | 183      | 244      | 305      | 366      | 427      | 488      | 610      | 732      | 854      |
|                           |                                       |                     |           | Noise Criteria                  |          | —        | —        | —        | 16       | 21       | 25       | 31       | 37       | 42       |
|                           |                                       |                     |           | Throw                           | 0°       | 7-11-21  | 10-16-24 | 13-19-28 | 16-21-30 | 17-23-32 | 20-24-35 | 23-28-39 | 24-30-42 | 27-32-46 |
| 22 1/2°                   | 6-9-17                                | 8-13-19             | 10-15-22  |                                 | 13-17-24 | 14-18-26 | 16-19-28 | 18-22-31 | 19-24-34 | 22-26-37 |          |          |          |          |
| 18 x 6                    | 14 x 8<br>28 x 4<br>30 x 4            | 0.65                |           | CFM                             |          | 195      | 260      | 325      | 390      | 455      | 520      | 650      | 780      | 910      |
|                           |                                       |                     |           | Noise Criteria                  |          | —        | —        | —        | 17       | 22       | 26       | 32       | 38       | 43       |
|                           |                                       |                     |           | Throw                           | 0°       | 7-12-22  | 11-16-25 | 13-20-29 | 16-22-32 | 18-24-34 | 21-25-36 | 24-29-40 | 25-32-45 | 28-34-48 |
| 22 1/2°                   | 6-10-18                               | 9-13-20             | 10-16-23  |                                 | 13-18-26 | 14-19-27 | 17-20-29 | 19-23-32 | 20-26-36 | 22-27-38 |          |          |          |          |
| 12 x 10                   | 20 x 6<br>24 x 5                      | 0.74                |           | CFM                             |          | 222      | 296      | 370      | 444      | 518      | 592      | 740      | 888      | 1036     |
|                           |                                       |                     |           | Noise Criteria                  |          | —        | —        | —        | 17       | 22       | 26       | 32       | 38       | 43       |
|                           |                                       |                     |           | Throw                           | 0°       | 8-13-24  | 11-17-27 | 14-21-31 | 17-24-33 | 20-26-36 | 22-27-39 | 25-31-43 | 27-33-48 | 30-36-51 |
| 22 1/2°                   | 6-10-19                               | 9-14-22             | 11-17-25  |                                 | 14-19-26 | 16-21-29 | 18-22-31 | 20-25-34 | 22-26-38 | 24-29-41 |          |          |          |          |
| 22 x 6                    | 16 x 8<br>28 x 5<br>36 x 4            | 0.80                |           | CFM                             |          | 240      | 320      | 400      | 480      | 560      | 640      | 800      | 960      | 1120     |
|                           |                                       |                     |           | Noise Criteria                  |          | —        | —        | —        | 18       | 23       | 27       | 33       | 39       | 44       |
|                           |                                       |                     |           | Throw                           | 0°       | 8-13-25  | 11-18-28 | 15-22-32 | 18-25-35 | 20-27-38 | 23-28-41 | 26-32-45 | 28-35-50 | 31-38-53 |
| 22 1/2°                   | 6-10-20                               | 9-14-22             | 12-18-26  |                                 | 14-20-28 | 16-22-30 | 18-22-33 | 21-26-36 | 22-28-40 | 25-30-42 |          |          |          |          |
| 12 x 12                   | 14 x 10<br>18 x 8<br>24 x 6<br>38 x 4 | 0.90                |           | CFM                             |          | 270      | 360      | 450      | 540      | 630      | 720      | 900      | 1080     | 1260     |
|                           |                                       |                     |           | Noise Criteria                  |          | —        | —        | —        | 18       | 23       | 27       | 33       | 39       | 44       |
|                           |                                       |                     |           | Throw                           | 0°       | 9-14-26  | 12-18-29 | 15-23-33 | 18-26-36 | 21-27-39 | 24-29-42 | 27-33-47 | 29-36-51 | 32-39-56 |
| 22 1/2°                   | 7-11-21                               | 10-14-23            | 12-18-26  |                                 | 14-21-29 | 17-22-31 | 19-23-34 | 22-26-38 | 23-29-41 | 26-31-45 |          |          |          |          |
| 18 x 10                   | 30 x 6                                | 1.13                |           | CFM                             |          | 339      | 452      | 565      | 678      | 791      | 904      | 1130     | 1356     | 1582     |
|                           |                                       |                     |           | Noise Criteria                  |          | —        | —        | —        | 19       | 24       | 28       | 34       | 40       | 45       |
|                           |                                       |                     |           | Throw                           | 0°       | 9-15-29  | 14-20-33 | 17-25-36 | 20-29-40 | 24-30-43 | 27-33-46 | 30-36-51 | 33-40-57 | 35-43-61 |
| 22 1/2°                   | 7-12-23                               | 11-16-26            | 14-20-29  |                                 | 16-23-32 | 19-24-34 | 22-26-37 | 24-29-41 | 26-32-46 | 28-34-49 |          |          |          |          |

For performance data notes, see F77.

## PERFORMANCE DATA: SUPPLY GRILLES AND REGISTERS • AIRFOIL BLADE 7100 SERIES MODELS: 71DV, 71DH, 71SV, 71SH

| Listed Duct Size (inches) | Alternate Sizes (inches)                 | Core Area (sq. ft.) | Ak Factor | Core Velocity     |         | 300                             | 400                              | 500                              | 600                              | 700                              | 800                              | 1000                             | 1200                              | 1400                              |
|---------------------------|--|---------------------|-----------|-------------------|---------|---------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|-----------------------------------|-----------------------------------|
|                           |  |                     |           | Velocity Pressure |         | .006                            | .010                             | .016                             | .022                             | .031                             | .040                             | .062                             | .090                              | .122                              |
|                           |  |                     |           | Total Pressure    | 0°      | .011                            | .019                             | .030                             | .044                             | .060                             | .078                             | .122                             | .175                              | .238                              |
| 14 x 14                   | 16 x 12<br>20 x 10<br>24 x 8<br>34 x 6   | 1.24                |           | CFM               | 0°      | 372                             | 496                              | 620                              | 744                              | 868                              | 992                              | 1240                             | 1488                              | 1736                              |
|                           |  |                     |           | Noise Criteria    | 22 1/2° | —                               | —                                | —                                | 19                               | 24                               | 28                               | 34                               | 40                                | 45                                |
|                           |  |                     |           | Throw             | 45°     | 11-18-33<br>9-14-26<br>6-9-17   | 16-25-39<br>13-20-31<br>8-13-20  | 20-29-42<br>16-23-34<br>10-15-21 | 24-33-47<br>19-26-38<br>12-17-24 | 27-36-51<br>22-29-41<br>14-18-26 | 31-39-54<br>25-31-43<br>16-20-27 | 35-42-60<br>28-34-48<br>18-21-30 | 39-47-66<br>31-38-53<br>20-24-33  | 41-51-71<br>33-41-57<br>21-26-36  |
| 18 x 12                   | 16 x 14<br>22 x 10<br>28 x 8<br>38 x 6   | 1.37                |           | CFM               | 0°      | 411                             | 548                              | 685                              | 822                              | 959                              | 1096                             | 1370                             | 1644                              | 1918                              |
|                           |  |                     |           | Noise Criteria    | 22 1/2° | —                               | —                                | 15                               | 20                               | 25                               | 29                               | 35                               | 41                                | 46                                |
|                           |  |                     |           | Throw             | 45°     | 11-18-33<br>9-14-26<br>6-9-17   | 16-25-39<br>13-20-31<br>8-13-20  | 20-30-43<br>16-24-34<br>10-15-22 | 24-33-47<br>19-26-38<br>12-17-24 | 28-36-51<br>22-29-41<br>14-18-26 | 32-39-54<br>26-31-43<br>16-20-27 | 35-43-61<br>28-34-49<br>18-22-31 | 39-47-67<br>31-38-54<br>20-24-34  | 41-51-72<br>33-41-58<br>21-26-36  |
| 24 x 10                   | 20 x 12<br>30 x 8                        | 1.52                |           | CFM               | 0°      | 456                             | 608                              | 760                              | 912                              | 1064                             | 1216                             | 1520                             | 1824                              | 2128                              |
|                           |  |                     |           | Noise Criteria    | 22 1/2° | —                               | —                                | 15                               | 20                               | 25                               | 29                               | 35                               | 41                                | 46                                |
|                           |  |                     |           | Throw             | 45°     | 12-19-35<br>10-15-28<br>6-10-18 | 16-25-41<br>13-20-33<br>8-13-21  | 21-32-45<br>17-26-36<br>11-16-23 | 25-35-50<br>20-28-40<br>13-18-25 | 29-38-53<br>23-30-42<br>15-19-27 | 34-41-57<br>27-33-46<br>17-21-29 | 37-45-65<br>30-36-51<br>19-23-32 | 41-50-70<br>33-40-56<br>21-25-35  | 43-53-76<br>34-42-61<br>22-27-38  |
| 16 x 16                   | 18 x 14<br>22 x 12<br>30 x 8             | 1.64                |           | CFM               | 0°      | 492                             | 656                              | 820                              | 984                              | 1148                             | 1312                             | 1640                             | 1968                              | 2296                              |
|                           |  |                     |           | Noise Criteria    | 22 1/2° | —                               | —                                | 15                               | 20                               | 25                               | 29                               | 35                               | 41                                | 46                                |
|                           |  |                     |           | Throw             | 45°     | 12-20-37<br>10-16-30<br>6-10-19 | 17-26-42<br>14-21-34<br>9-13-21  | 22-32-47<br>18-26-38<br>11-16-24 | 26-37-51<br>21-30-41<br>13-19-26 | 31-40-56<br>25-32-45<br>16-20-28 | 35-42-59<br>28-34-47<br>18-21-30 | 39-47-67<br>31-38-54<br>20-24-34 | 42-51-73<br>34-41-58<br>21-26-37  | 46-56-79<br>37-45-63<br>23-28-40  |
| 24 x 12                   | 18 x 16<br>20 x 14<br>30 x 10<br>36 x 8  | 1.85                |           | CFM               | 0°      | 555                             | 740                              | 925                              | 1110                             | 1295                             | 1480                             | 1850                             | 2220                              | 2590                              |
|                           |  |                     |           | Noise Criteria    | 22 1/2° | —                               | —                                | 16                               | 21                               | 26                               | 30                               | 36                               | 42                                | 47                                |
|                           |  |                     |           | Throw             | 45°     | 12-20-38<br>10-16-30<br>6-10-19 | 18-27-44<br>14-22-35<br>9-14-22  | 22-33-48<br>18-26-38<br>11-17-24 | 27-38-54<br>22-30-43<br>14-19-27 | 32-40-58<br>26-32-46<br>16-20-29 | 36-44-62<br>29-35-50<br>18-22-31 | 40-48-69<br>32-38-55<br>20-24-35 | 44-54-76<br>35-43-61<br>22-27-38  | 48-58-82<br>38-46-66<br>24-29-41  |
| 18 x 18                   | 20 x 16<br>24 x 14<br>28 x 12<br>32 x 10 | 2.10                |           | CFM               | 0°      | 630                             | 840                              | 1050                             | 1260                             | 1470                             | 1680                             | 2100                             | 2520                              | 2940                              |
|                           |  |                     |           | Noise Criteria    | 22 1/2° | —                               | —                                | 16                               | 21                               | 26                               | 30                               | 36                               | 42                                | 47                                |
|                           |  |                     |           | Throw             | 45°     | 13-21-40<br>10-17-32<br>7-11-20 | 19-29-47<br>15-23-38<br>10-15-24 | 24-36-52<br>19-29-42<br>12-18-26 | 29-40-57<br>23-32-46<br>15-20-29 | 33-43-62<br>26-34-50<br>17-22-31 | 38-47-66<br>30-38-53<br>19-24-33 | 42-52-74<br>34-42-59<br>21-26-37 | 47-57-81<br>38-46-65<br>24-29-41  | 50-62-87<br>40-50-70<br>25-31-44  |
| 30 x 12                   | 20 x 18<br>22 x 16<br>26 x 14<br>36 x 10 | 2.32                |           | CFM               | 0°      | 696                             | 928                              | 1160                             | 1392                             | 1624                             | 1856                             | 2320                             | 2784                              | 3248                              |
|                           |  |                     |           | Noise Criteria    | 22 1/2° | —                               | —                                | 17                               | 22                               | 27                               | 31                               | 37                               | 43                                | 48                                |
|                           |  |                     |           | Throw             | 45°     | 14-23-43<br>11-18-34<br>7-12-22 | 21-31-50<br>17-25-40<br>11-16-25 | 26-39-56<br>19-29-42<br>13-20-28 | 31-43-61<br>25-34-49<br>16-22-31 | 36-47-67<br>29-38-54<br>18-24-34 | 41-50-71<br>33-40-57<br>21-25-36 | 46-56-79<br>32-45-63<br>23-28-40 | 50-61-86<br>40-49-69<br>25-31-43  | 54-67-94<br>43-54-75<br>27-34-47  |
| 24 x 16                   | 32 x 12                                  | 2.50                |           | CFM               | 0°      | 750                             | 1000                             | 1250                             | 1500                             | 1750                             | 2000                             | 2500                             | 3000                              | 3500                              |
|                           |  |                     |           | Noise Criteria    | 22 1/2° | —                               | —                                | 17                               | 22                               | 27                               | 31                               | 37                               | 43                                | 48                                |
|                           |  |                     |           | Throw             | 45°     | 14-24-45<br>11-19-36<br>7-12-23 | 22-32-52<br>18-26-42<br>11-16-26 | 27-40-58<br>22-32-46<br>14-20-29 | 32-45-64<br>26-36-51<br>16-23-32 | 37-49-68<br>30-39-54<br>19-25-34 | 43-52-74<br>34-42-59<br>22-26-37 | 48-58-82<br>38-46-66<br>24-29-41 | 52-64-90<br>42-51-72<br>26-32-45  | 56-68-97<br>45-54-78<br>28-34-49  |
| 20 x 20                   | 22 x 18                                  | 2.61                |           | CFM               | 0°      | 783                             | 1044                             | 1305                             | 1566                             | 1827                             | 2088                             | 2610                             | 3132                              | 3654                              |
|                           |  |                     |           | Noise Criteria    | 22 1/2° | —                               | —                                | 17                               | 22                               | 27                               | 31                               | 37                               | 43                                | 48                                |
|                           |  |                     |           | Throw             | 45°     | 15-24-46<br>12-19-37<br>8-12-23 | 22-32-53<br>18-26-42<br>11-16-27 | 27-41-59<br>22-33-47<br>14-21-30 | 32-46-65<br>26-37-52<br>16-23-33 | 38-50-70<br>30-40-56<br>19-25-35 | 44-53-75<br>35-42-60<br>22-27-38 | 49-59-84<br>39-47-67<br>25-30-42 | 53-65-92<br>42-52-74<br>27-33-46  | 58-70-99<br>46-56-79<br>29-35-50  |
| 36 x 12                   | 22 x 20<br>24 x 18<br>26 x 16<br>30 x 14 | 2.79                |           | CFM               | 0°      | 837                             | 1116                             | 1395                             | 1674                             | 1953                             | 2232                             | 2790                             | 3348                              | 3906                              |
|                           |  |                     |           | Noise Criteria    | 22 1/2° | —                               | —                                | 17                               | 22                               | 27                               | 31                               | 37                               | 43                                | 48                                |
|                           |  |                     |           | Throw             | 45°     | 15-25-48<br>12-20-38<br>8-13-24 | 23-34-55<br>18-27-44<br>12-17-28 | 28-42-61<br>22-34-49<br>14-21-31 | 34-48-68<br>27-38-54<br>17-24-34 | 4-51-73<br>32-41-58<br>20-26-37  | 45-55-77<br>36-44-62<br>23-28-39 | 50-61-86<br>40-49-69<br>25-31-43 | 55-68-95<br>44-54-76<br>28-34-48  | 59-73-103<br>47-58-82<br>30-37-52 |
| 22 x 22                   | 24 x 20<br>26 x 18<br>30 x 16<br>40 x 12 | 3.17                |           | CFM               | 0°      | 951                             | 1268                             | 1585                             | 1902                             | 2219                             | 2536                             | 3170                             | 3804                              | 4438                              |
|                           |  |                     |           | Noise Criteria    | 22 1/2° | —                               | —                                | 18                               | 23                               | 28                               | 32                               | 38                               | 44                                | 49                                |
|                           |  |                     |           | Throw             | 45°     | 17-27-50<br>14-22-40<br>9-14-25 | 24-36-58<br>19-29-46<br>12-18-29 | 29-45-65<br>23-36-52<br>15-23-33 | 36-50-71<br>29-40-57<br>18-25-36 | 42-54-77<br>34-43-62<br>21-27-39 | 47-58-82<br>38-46-66<br>24-29-41 | 53-65-92<br>42-52-74<br>27-33-46 | 58-71-101<br>46-57-81<br>29-36-51 | 62-77-109<br>50-62-87<br>31-39-55 |
| 42 x 12                   | 36 x 14                                  | 3.27                |           | CFM               | 0°      | 981                             | 1308                             | 1635                             | 1962                             | 2289                             | 2616                             | 3270                             | 3924                              | 4578                              |
|                           |  |                     |           | Noise Criteria    | 22 1/2° | —                               | —                                | 18                               | 23                               | 28                               | 32                               | 38                               | 44                                | 49                                |
|                           |  |                     |           | Throw             | 45°     | 17-27-51<br>14-22-41<br>9-14-26 | 24-36-59<br>19-29-47<br>12-18-30 | 30-45-66<br>24-36-53<br>15-23-33 | 36-51-72<br>29-41-58<br>18-26-36 | 42-55-77<br>34-44-62<br>21-28-39 | 48-59-83<br>38-47-66<br>24-30-42 | 53-66-93<br>42-53-74<br>27-33-47 | 59-72-101<br>47-58-81<br>3-36-51  | 63-77-109<br>50-62-87<br>32-39-55 |
| 30 x 18                   | 24 x 22<br>34 x 16<br>40 x 14            | 3.54                |           | CFM               | 0°      | 1062                            | 1416                             | 1770                             | 2124                             | 2478                             | 2832                             | 3540                             | 4248                              | 4956                              |
|                           |  |                     |           | Noise Criteria    | 22 1/2° | —                               | —                                | 18                               | 23                               | 28                               | 32                               | 38                               | 44                                | 49                                |
|                           |  |                     |           | Throw             | 45°     | 18-28-53<br>14-22-42<br>9-14-27 | 25-37-61<br>20-30-49<br>13-19-31 | 31-47-69<br>25-38-55<br>16-24-35 | 37-53-75<br>30-42-60<br>19-27-38 | 44-57-81<br>35-46-65<br>22-29-41 | 50-61-86<br>40-49-69<br>25-31-43 | 56-69-97<br>45-55-78<br>28-35-49 | 61-75-106<br>49-60-85<br>31-38-53 | 66-81-115<br>53-65-92<br>33-41-58 |

GRILLES AND REGISTERS



For performance data notes, see F77.

## PERFORMANCE DATA: SUPPLY GRILLES AND REGISTERS • AIRFOIL BLADE 7100 SERIES MODELS: 71DV, 71DH, 71SV, 71SH

| Listed Duct Size (inches) | Alternate Sizes (inches)                 | Core Area (sq. ft.) | Ak Factor | Core Velocity  |          | 300      | 400      | 500       | 600       | 700       | 800       | 1000       | 1200       | 1400       |
|---------------------------|--|---------------------|-----------|----------------|----------|----------|----------|-----------|-----------|-----------|-----------|------------|------------|------------|
|                           |  |                     |           | Velocity       | Pressure | .006     | .010     | .016      | .022      | .031      | .040      | .062       | .090       | .122       |
| 24 x 24                   | 26 x 22<br>28 x 20<br>32 x 18<br>36 x 16 | 3.79                |           | CFM            |          | 1137     | 1516     | 1895      | 2274      | 2653      | 3032      | 3790       | 4548       | 5306       |
|                           |  |                     |           | Noise Criteria |          | —        | —        | 18        | 23        | 28        | 32        | 38         | 44         | 49         |
|                           |  |                     |           | Throw          | 0°       | 18-29-55 | 29-36-62 | 33-48-70  | 39-55-77  | 45-59-83  | 51-62-89  | 57-70-99   | 62-77-108  | 68-83-117  |
|                           |  |                     |           |                | 22 1/2°  | 14-23-44 | 21-31-50 | 26-38-56  | 31-44-62  | 36-47-66  | 41-50-71  | 46-56-79   | 50-62-86   | 54-66-94   |
| 36 x 18                   | 32 x 20<br>40 x 16<br>46 x 14            | 4.29                |           | CFM            |          | 1287     | 1716     | 2145      | 2574      | 3003      | 3432      | 4290       | 5148       | 6006       |
|                           |  |                     |           | Noise Criteria |          | —        | —        | 19        | 24        | 29        | 33        | 39         | 45         | 50         |
|                           |  |                     |           | Throw          | 0°       | 19-31-58 | 28-42-68 | 35-52-75  | 2-58-83   | 48-63-89  | 55-68-95  | 61-75-106  | 68-83-117  | 73-89-125  |
|                           |  |                     |           |                | 22 1/2°  | 15-25-46 | 22-34-54 | 28-42-60  | 34-46-66  | 38-50-71  | 44-54-76  | 49-60-85   | 54-66-94   | 58-71-100  |
| 26 x 26                   | 28 x 24<br>48 x 14                       | 4.47                |           | CFM            |          | 1341     | 1788     | 2235      | 2682      | 3129      | 3576      | 4470       | 5364       | 6258       |
|                           |  |                     |           | Noise Criteria |          | —        | —        | 19        | 24        | 29        | 33        | 39         | 45         | 50         |
|                           |  |                     |           | Throw          | 0°       | 19-32-59 | 28-43-69 | 35-53-77  | 43-59-85  | 49-65-91  | 56-69-98  | 63-77-109  | 69-85-120  | 75-91-129  |
|                           |  |                     |           |                | 22 1/2°  | 15-26-47 | 22-34-55 | 28-42-62  | 34-47-68  | 39-52-73  | 45-55-78  | 50-62-87   | 55-68-96   | 60-73-103  |
| 30 x 24                   | 32 x 22<br>36 x 20<br>40 x 18            | 4.77                |           | CFM            |          | 1431     | 1908     | 2385      | 2862      | 3339      | 3816      | 4770       | 5724       | 6678       |
|                           |  |                     |           | Noise Criteria |          | —        | —        | 19        | 24        | 29        | 33        | 39         | 45         | 50         |
|                           |  |                     |           | Throw          | 0°       | 20-33-61 | 29-44-71 | 36-54-79  | 44-61-87  | 51-67-94  | 58-71-101 | 65-79-112  | 71-87-123  | 77-94-133  |
|                           |  |                     |           |                | 22 1/2°  | 16-26-49 | 23-35-57 | 29-43-63  | 35-49-70  | 41-54-75  | 46-57-81  | 52-63-90   | 57-70-98   | 62-75-106  |
| 42 x 18                   | 28 x 26                                  | 4.99                |           | CFM            |          | 1497     | 1996     | 2495      | 2994      | 3493      | 3992      | 4990       | 5988       | 6986       |
|                           |  |                     |           | Noise Criteria |          | —        | —        | 20        | 25        | 30        | 34        | 40         | 46         | 51         |
|                           |  |                     |           | Throw          | 0°       | 20-33-62 | 30-44-72 | 37-55-80  | 44-62-88  | 52-67-95  | 59-72-102 | 66-80-114  | 72-88-125  | 77-95-135  |
|                           |  |                     |           |                | 22 1/2°  | 16-26-50 | 24-35-58 | 30-44-64  | 35-50-70  | 42-54-76  | 47-58-82  | 53-64-91   | 58-70-100  | 62-76-108  |
| 28 x 28                   | 30 x 26<br>36 x 22<br>40 x 20            | 5.20                |           | CFM            |          | 1560     | 2080     | 2600      | 3120      | 3640      | 4160      | 5200       | 6240       | 7280       |
|                           |  |                     |           | Noise Criteria |          | —        | —        | 20        | 25        | 30        | 34        | 40         | 46         | 51         |
|                           |  |                     |           | Throw          | 0°       | 21-34-63 | 30-45-74 | 38-56-82  | 45-63-90  | 53-69-97  | 60-74-104 | 67-82-116  | 74-90-128  | 79-97-137  |
|                           |  |                     |           |                | 22 1/2°  | 17-27-50 | 24-36-59 | 30-45-66  | 36-50-72  | 42-55-78  | 48-59-83  | 54-66-93   | 59-72-102  | 63-78-110  |
| 42 x 20                   | 30 x 28                                  | 5.57                |           | CFM            |          | 1671     | 2228     | 2785      | 3342      | 3899      | 4456      | 5570       | 6684       | 7798       |
|                           |  |                     |           | Noise Criteria |          | —        | —        | 20        | 25        | 30        | 34        | 40         | 46         | 51         |
|                           |  |                     |           | Throw          | 0°       | 22-35-66 | 31-47-76 | 39-58-84  | 47-66-93  | 55-71-100 | 62-76-107 | 70-84-120  | 76-93-131  | 82-100-142 |
|                           |  |                     |           |                | 22 1/2°  | 18-28-53 | 25-38-61 | 31-46-67  | 38-53-74  | 44-57-80  | 50-61-86  | 56-67-96   | 61-74-105  | 66-80-114  |
| 36 x 24                   | 40 x 22<br>44 x 20                       | 5.74                |           | CFM            |          | 1722     | 2296     | 2870      | 3444      | 4018      | 4592      | 5740       | 6888       | 8036       |
|                           |  |                     |           | Noise Criteria |          | —        | —        | 20        | 25        | 30        | 34        | 40         | 46         | 51         |
|                           |  |                     |           | Throw          | 0°       | 23-36-68 | 32-49-78 | 41-60-88  | 49-68-96  | 57-74-104 | 64-78-112 | 72-88-124  | 78-96-137  | 85-104-148 |
|                           |  |                     |           |                | 22 1/2°  | 18-29-54 | 26-39-62 | 33-48-70  | 39-54-77  | 46-59-83  | 51-62-90  | 58-70-99   | 62-77-110  | 68-83-118  |
| 30 x 30                   | 34 x 26<br>38 x 24<br>48 x 20            | 5.99                |           | CFM            |          | 1797     | 2396     | 2995      | 3594      | 4193      | 4792      | 5990       | 7188       | 8386       |
|                           |  |                     |           | Noise Criteria |          | —        | —        | 20        | 25        | 30        | 34        | 40         | 46         | 51         |
|                           |  |                     |           | Throw          | 0°       | 23-36-69 | 33-49-80 | 41-61-89  | 49-69-98  | 57-75-106 | 65-80-113 | 73-89-126  | 80-98-138  | 86-106-150 |
|                           |  |                     |           |                | 22 1/2°  | 18-29-55 | 26-39-64 | 33-49-71  | 39-55-78  | 46-60-85  | 52-64-90  | 58-71-101  | 64-78-110  | 69-85-120  |
| 42 x 24                   | 36 x 28<br>42 x 24<br>46 x 22            | 6.72                |           | CFM            |          | 2016     | 2688     | 3360      | 4032      | 4704      | 5376      | 6720       | 8064       | 9408       |
|                           |  |                     |           | Noise Criteria |          | —        | —        | 21        | 26        | 31        | 35        | 41         | 47         | 52         |
|                           |  |                     |           | Throw          | 0°       | 24-39-72 | 34-51-84 | 43-64-93  | 51-72-102 | 60-78-111 | 68-84-118 | 77-93-132  | 84-102-144 | 90-111-157 |
|                           |  |                     |           |                | 22 1/2°  | 19-31-58 | 27-41-67 | 34-51-74  | 41-58-82  | 48-62-89  | 54-67-94  | 62-74-106  | 67-82-115  | 72-89-126  |
| 32 x 32                   | 40 x 26                                  | 6.84                |           | CFM            |          | 2052     | 2736     | 3420      | 4104      | 4788      | 5472      | 6840       | 8208       | 9576       |
|                           |  |                     |           | Noise Criteria |          | —        | —        | 21        | 26        | 31        | 35        | 41         | 47         | 52         |
|                           |  |                     |           | Throw          | 0°       | 24-39-73 | 34-52-84 | 43-65-94  | 52-73-103 | 61-79-112 | 69-84-119 | 77-94-133  | 84-103-146 | 91-112-158 |
|                           |  |                     |           |                | 22 1/2°  | 19-31-58 | 27-42-67 | 34-52-75  | 42-58-82  | 49-63-90  | 55-67-95  | 62-75-106  | 67-82-117  | 72-89-126  |
| 36 x 30                   | 38 x 28                                  | 7.22                |           | CFM            |          | 2166     | 2888     | 3610      | 4332      | 5054      | 5776      | 7220       | 8664       | 10108      |
|                           |  |                     |           | Noise Criteria |          | —        | —        | 21        | 26        | 31        | 35        | 41         | 47         | 52         |
|                           |  |                     |           | Throw          | 0°       | 25-40-76 | 36-54-87 | 45-68-98  | 54-76-108 | 63-82-116 | 71-87-124 | 80-98-139  | 87-108-151 | 94-116-164 |
|                           |  |                     |           |                | 22 1/2°  | 20-32-61 | 29-43-70 | 36-54-78  | 43-61-86  | 50-66-93  | 57-70-99  | 64-78-111  | 70-86-121  | 75-93-131  |
| 48 x 24                   | 34 x 34<br>36 x 32<br>38 x 30<br>42 x 28 | 7.69                |           | CFM            |          | 2307     | 3076     | 3845      | 4614      | 5383      | 6152      | 7690       | 9228       | 10766      |
|                           |  |                     |           | Noise Criteria |          | —        | —        | 22        | 27        | 32        | 36        | 42         | 48         | 53         |
|                           |  |                     |           | Throw          | 0°       | 26-41-77 | 37-55-90 | 46-69-100 | 55-77-109 | 64-84-118 | 73-90-127 | 82-100-142 | 90-109-155 | 97-118-167 |
|                           |  |                     |           |                | 22 1/2°  | 21-33-62 | 30-44-72 | 37-55-80  | 44-62-87  | 51-67-94  | 58-72-102 | 66-80-114  | 72-87-124  | 78-94-134  |
| 45°                       | 13-22-39                                 | 19-28-45            | 23-45-50  | 28-39-55       | 32-42-59 | 37-45-64 | 41-50-71 | 45-55-78  | 49-59-84  |           |           |            |            |            |

For performance data notes, see F77.

## PERFORMANCE DATA: SUPPLY GRILLES AND REGISTERS • AIRFOIL BLADE 7100 SERIES MODELS: 71DV, 71DH, 71SV, 71SH

| Listed Duct Size (inches) | Alternate Sizes (inches)      | Core Area (sq. ft.) | Ak Factor | Core Velocity  |                | 300                  | 400                   | 500                   | 600                   | 700                   | 800                    | 1000                    | 1200                     | 1400                     |
|---------------------------|-------------------------------|---------------------|-----------|----------------|----------------|----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------------|-------------------------|--------------------------|--------------------------|
|                           |                               |                     |           | Velocity       | Pressure       | .006                 | .010                  | .016                  | .022                  | .031                  | .040                   | .062                    | .090                     | .122                     |
| 36 x 34                   | 38 x 32<br>40 x 30<br>48 x 26 | 8.20                |           | CFM            |                | 2460                 | 3280                  | 4100                  | 4920                  | 5740                  | 6560                   | 8200                    | 9840                     | 11480                    |
|                           |                               |                     |           | Noise Criteria |                | –                    | 15                    | 22                    | 27                    | 32                    | 36                     | 42                      | 48                       | 53                       |
|                           |                               |                     |           | Throw          | 0°             | 26-42-79             | 37-57-91              | 47-70-102             | 57-79-111             | 65-85-121             | 75-91-129              | 84-102-144              | 91-111-158               | 98-121-171               |
|                           |                               |                     |           |                | 22 1/2°<br>45° | 21-34-63<br>13-21-40 | 30-46-73<br>19-29-    | 38-56-82<br>24-35-51  | 46-63-89<br>29-40-56  | 52-68-97<br>33-43-61  | 60-73-103<br>38-46-65  | 67-82-115<br>42-51-72   | 73-89-126<br>46-56-79    | 78-97-137<br>49-61-86    |
| 36 x 36                   | 38 x 34<br>42 x 30<br>46 x 28 | 8.69                |           | CFM            |                | 2607                 | 3476                  | 4345                  | 5214                  | 6083                  | 6952                   | 8690                    | 10428                    | 12166                    |
|                           |                               |                     |           | Noise Criteria |                | –                    | 15                    | 22                    | 27                    | 32                    | 36                     | 42                      | 48                       | 53                       |
|                           |                               |                     |           | Throw          | 0°             | 28-45-84             | 36-60-96              | 49-74-108             | 60-84-117             | 69-90-127             | 78-96-136              | 88-108-152              | 96-117-166               | 104-127-180              |
|                           |                               |                     |           |                | 22 1/2°<br>45° | 22-36-67<br>14-23-42 | 31-48-77<br>20-30-48  | 39-59-86<br>25-37-54  | 48-67-94<br>30-42-59  | 55-72-102<br>35-45-64 | 62-77-109<br>39-48-68  | 70-86-122<br>44-54-76   | 77-94-133<br>48-59-83    | 83-102-144<br>52-64-90   |
| 38 x 38                   | 42 x 34                       | 9.70                |           | CFM            |                | 2910                 | 3880                  | 4850                  | 5820                  | 6790                  | 7760                   | 9700                    | 11640                    | 13580                    |
|                           |                               |                     |           | Noise Criteria |                | –                    | 16                    | 23                    | 28                    | 33                    | 37                     | 43                      | 49                       | 54                       |
|                           |                               |                     |           | Throw          | 0°             | 28-47-88             | 42-62-101             | 53-78-114             | 62-88-125             | 73-95-134             | 83-101-143             | 93-114-161              | 101-125-176              | 109-134-190              |
|                           |                               |                     |           |                | 22 1/2°<br>45° | 22-38-70<br>14-24-44 | 34-50-81<br>21-31-51  | 42-62-91<br>27-39-57  | 50-70-100<br>31-44-63 | 58-76-107<br>37-48-67 | 66-81-114<br>42-51-72  | 74-91-129<br>47-57-81   | 81-100-141<br>51-63-88   | 87-107-152<br>55-67-95   |
| 42 x 36                   | 44 x 34<br>48 x 30            | 10.16               |           | CFM            |                | 3048                 | 4064                  | 5080                  | 6096                  | 7112                  | 8128                   | 10160                   | 12192                    | 14224                    |
|                           |                               |                     |           | Noise Criteria |                | –                    | 16                    | 23                    | 28                    | 33                    | 37                     | 43                      | 49                       | 54                       |
|                           |                               |                     |           | Throw          | 0°             | 29-48-90             | 43-64-104             | 53-80-117             | 64-90-127             | 75-97-138             | 85-104-147             | 95-117-165              | 104-127-180              | 112-138-195              |
|                           |                               |                     |           |                | 22 1/2°<br>45° | 23-38-72<br>15-24-45 | 34-51-83<br>22-32-52  | 42-64-94<br>27-40-59  | 51-72-102<br>32-45-64 | 60-78-110<br>38-49-69 | 68-83-118<br>43-52-74  | 76-94-132<br>48-59-83   | 83-102-144<br>52-64-90   | 90-110-156<br>56-69-98   |
| 40 x 40                   | 42 x 38<br>46 x 34<br>48 x 32 | 10.77               |           | CFM            |                | 3231                 | 4308                  | 5385                  | 6462                  | 7539                  | 8616                   | 10770                   | 12924                    | 15078                    |
|                           |                               |                     |           | Noise Criteria |                | –                    | 16                    | 23                    | 28                    | 33                    | 37                     | 43                      | 49                       | 54                       |
|                           |                               |                     |           | Throw          | 0°             | 31-50-94             | 44-67-108             | 56-84-121             | 67-94-132             | 77-102-143            | 88-108-153             | 99-121-171              | 108-132-187              | 117-143-203              |
|                           |                               |                     |           |                | 22 1/2°<br>45° | 25-40-75<br>16-25-47 | 35-54-86<br>22-34-54  | 45-67-97<br>28-42-61  | 54-75-106<br>34-47-66 | 62-82-114<br>39-51-72 | 70-86-122<br>44-54-72  | 79-97-137<br>54-61-86   | 86-106-150<br>54-66-94   | 94-114-162<br>59-72-102  |
| 42 x 42                   | 44 x 40<br>46 x 38<br>48 x 36 | 11.89               |           | CFM            |                | 3567                 | 4756                  | 5945                  | 7134                  | 8323                  | 9512                   | 11890                   | 14268                    | 16646                    |
|                           |                               |                     |           | Noise Criteria |                | –                    | 17                    | 24                    | 29                    | 34                    | 38                     | 44                      | 50                       | 55                       |
|                           |                               |                     |           | Throw          | 0°             | 32-52-97             | 46-69-112             | 58-86-125             | 69-97-138             | 81-105-149            | 92-112-159             | 102-125-178             | 112-138-195              | 122-145-210              |
|                           |                               |                     |           |                | 22 1/2°<br>45° | 26-42-78<br>16-26-49 | 37-55-90<br>23-35-56  | 46-69-100<br>29-43-63 | 55-78-110<br>35-49-69 | 65-84-119<br>41-53-75 | 74-90-127<br>46-56-80  | 82-100-142<br>51-63-89  | 90-110-156<br>56-69-98   | 98-119-168<br>61-75-105  |
| 44 x 44                   | 46 x 42                       | 13.07               |           | CFM            |                | 3921                 | 5228                  | 6535                  | 7842                  | 9149                  | 10456                  | 13070                   | 15684                    | 18298                    |
|                           |                               |                     |           | Noise Criteria |                | –                    | 17                    | 24                    | 29                    | 34                    | 38                     | 44                      | 50                       | 55                       |
|                           |                               |                     |           | Throw          | 0°             | 34-55-104            | 49-74-120             | 61-92-133             | 74-104-146            | 86-112-158            | 97-120-168             | 109-133-189             | 120-146-207              | 129-158-223              |
|                           |                               |                     |           |                | 22 1/2°<br>45° | 27-44-83<br>17-28-52 | 39-59-96<br>25-37-60  | 49-74-106<br>31-46-67 | 59-83-117<br>37-52-73 | 69-90-126<br>43-56-79 | 78-96-134<br>49-60-84  | 87-106-151<br>55-67-95  | 96-117-166<br>60-73-104  | 103-126-178<br>65-79-112 |
| 46 x 46                   |                               | 14.30               |           | CFM            |                | 4290                 | 5720                  | 7150                  | 8580                  | 10010                 | 11440                  | 14300                   | 17160                    | 20020                    |
|                           |                               |                     |           | Noise Criteria |                | –                    | 17                    | 24                    | 29                    | 34                    | 38                     | 44                      | 50                       | 55                       |
|                           |                               |                     |           | Throw          | 0°             | 35-57-107            | 51-76-124             | 63-95-138             | 76-107-151            | 89-116-163            | 101-124-174            | 113-138-195             | 124-151-214              | 134-163-231              |
|                           |                               |                     |           |                | 22 1/2°<br>45° | 28-46-86<br>18-29-54 | 41-61-99<br>26-38-62  | 50-76-110<br>32-48-69 | 61-86-121<br>38-54-76 | 71-93-130<br>45-58-82 | 81-99-139<br>51-62-87  | 90-110-156<br>57-69-98  | 99-121-171<br>62-76-107  | 107-130-185<br>62-82-116 |
| 48 x 48                   |                               | 15.59               |           | CFM            |                | 4677                 | 6236                  | 7795                  | 9354                  | 10913                 | 12472                  | 15590                   | 18708                    | 21826                    |
|                           |                               |                     |           | Noise Criteria |                | –                    | 18                    | 25                    | 30                    | 35                    | 39                     | 45                      | 51                       | 56                       |
|                           |                               |                     |           | Throw          | 0°             | 37-60-113            | 53-80-131             | 67-100-146            | 80-113-159            | 94-122-173            | 106-131-185            | 119-146-206             | 131-159-226              | 140-173-244              |
|                           |                               |                     |           |                | 22 1/2°<br>45° | 30-48-90<br>19-30-57 | 42-64-105<br>27-40-66 | 54-80-117<br>34-50-73 | 64-90-127<br>40-57-80 | 75-98-138<br>47-61-87 | 85-105-148<br>53-66-93 | 95-117-165<br>60-73-103 | 105-127-181<br>62-80-113 | 112-138-195<br>70-87-122 |



### Performance Notes:

- All pressures are in inches w.g..
- Core velocity is in feet per minute.
- Throw values are given for terminal velocities of 150, 100 and 50 fpm under isothermal conditions.
- Performance data is based on double deflection grille with opposed blade damper (register).
- 0°, 22 1/2° and 45° represent vertical blade deflection angles and horizontal spread.
- Additional performance notes and correction factors for various models and settings may be found on page F73.
- Noise Criteria (NC) values are based on a room absorption of 10 dB, re 10<sup>-12</sup> watts. Dash (-) in space denotes a NC level of less than 15.
- Data derived from tests conducted in accordance with ANSI/ASHRAE Standard 70 – 2006.