## PERFORMANCE DATA:

### Models 61CC, 61CCD, 51CC, 51CCD

| Nom. Neck Size (inches) | Core Area (sq. ft.) | Neck Velocity, FPM | | 100 | 200 | 300 | 400 | 500 | 600 | 700 | 800 | 900 | 1000 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Total Pressure | | .003 | .015 | .032 | .058 | .094 | .136 | .182 | .234 | .302 | .369 |
| 6 x 6 | .20 | CFM | | | | 60 | 80 | 100 | 120 | 140 | 160 | 180 | 200 |
| | | Noise Criteria | | | | — | 15 | 21 | 26 | 29 | 32 | 35 | 38 |
| | | Throw | 4-Way | | | 4-6-9 | 5-8-13 | 6-9-15 | 8-11-17 | 9-13-20 | 10-15-23 | 11-16-26 | 12-17-28 |
| | | | 3-Way | | | 4-6-10 | 6-9-14 | 7-10-16 | 8-12-19 | 10-14-22 | 11-16-25 | 12-17-28 | 13-19-31 |
| | | | 2-Way | | | 5-7-11 | 6-9-15 | 8-11-17 | 9-14-21 | 10-16-24 | 12-17-28 | 13-19-31 | 15-21-39 |
| | | | 1-Way | | | 6-9-14 | 8-11-17 | 9-14-21 | 11-16-25 | 12-18-29 | 14-20-33 | 16-23-37 | 17-25-41 |
| 8 x 8 | .38 | CFM | | | 75 | 115 | 150 | 190 | 230 | 265 | 305 | 340 | 380 |
| | | Noise Criteria | | | — | — | 17 | 23 | 28 | 31 | 35 | 37 | 40 |
| | | Throw | 4-Way | | 3-4-7 | 5-7-11 | 6-9-15 | 8-11-17 | 9-13-20 | 10-16-24 | 12-17-27 | 13-18-30 | 14-20-33 |
| | | | 3-Way | | 3-5-8 | 5-7-12 | 6-9-15 | 8-12-18 | 10-14-22 | 11-16-25 | 14-18-29 | 14-20-32 | 15-22-36 |
| | | | 2-Way | | 4-6-9 | 5-8-13 | 7-11-16 | 9-13-20 | 10-16-24 | 12-17-28 | 14-20-32 | 15-22-36 | 16-25-40 |
| | | | 1-Way | | 4-6-10 | 7-10-16 | 9-13-20 | 10-16-24 | 12-18-29 | 15-21-34 | 17-24-39 | 17-26-43 | 19-30-48 |
| 10 x 10 | .61 | CFM | | 60 | 120 | 185 | 245 | 305 | 365 | 430 | 490 | 550 | 610 |
| | | Noise Criteria | | — | — | 13 | 20 | 26 | 30 | 34 | 37 | 40 | 43 |
| | | Throw | 4-Way | 2-3-4 | 4-6-9 | 5-8-13 | 7-11-16 | 9-13-20 | 10-16-24 | 12-17-27 | 13-19-21 | 15-21-35 | 16-24-39 |
| | | | 3-Way | 2-3-5 | 4-6-9 | 6-9-14 | 8-11-17 | 9-14-21 | 11-16-26 | 13-18-30 | 14-20-33 | 16-24-38 | 17-26-42 |
| | | | 2-Way | 2-3-5 | 4-6-10 | 6-9-15 | 8-12-19 | 10-16-24 | 12-17-28 | 14-20-33 | 16-23-37 | 17-26-42 | 19-28-46 |
| | | | 1-Way | 2-4-6 | 5-7-12 | 8-11-17 | 10-15-27 | 12-18-29 | 15-21-24 | 17-25-40 | 18-28-45 | 20-31-49 | 23-35-55 |
| 12 x 12 | .90 | CFM | | 90 | 180 | 270 | 360 | 450 | 540 | 630 | 720 | 800 | 900 |
| | | Noise Criteria | | — | — | 14 | 21 | 27 | 31 | 35 | 38 | 41 | 44 |
| | | Throw | 4-Way | 2-3-5 | 4-6-9 | 6-9-14 | 8-12-18 | 10-14-22 | 11-16-26 | 13-18-30 | 15-21-34 | 16-23-38 | 17-26-42 |
| | | | 3-Way | 2-3-5 | 4-6-10 | 6-9-15 | 8-12-19 | 10-16-24 | 12-17-28 | 14-20-32 | 16-23-37 | 17-25-41 | 19-28-46 |
| | | | 2-Way | 2-4-6 | 5-7-11 | 7-11-16 | 9-14-21 | 11-16-26 | 13-19-31 | 15-22-36 | 17-25-41 | 19-28-46 | 21-31-51 |
| | | | 1-Way | 3-4-7 | 6-9-14 | 8-12-19 | 11-16-25 | 13-19-30 | 16-23-38 | 18-27-44 | 20-30-49 | 22-35-55 | 25-38-62 |
| 14 x 14 | 1.24 | CFM | | 125 | 250 | 375 | 500 | 620 | 745 | 870 | 995 | 1120 | 1240 |
| | | Noise Criteria | | — | — | 15 | 23 | 29 | 33 | 37 | 40 | 43 | 46 |
| | | Throw | 4-Way | 2-3-5 | 4-6-10 | 6-9-15 | 8-12-19 | 10-16-24 | 12-17-28 | 14-20-33 | 16-23-37 | 17-26-42 | 19-28-46 |
| | | | 3-Way | 2-4-6 | 5-7-11 | 7-10-16 | 9-14-21 | 11-16-26 | 13-19-31 | 15-22-36 | 16-25-40 | 18-28-45 | 20-31-49 |
| | | | 2-Way | 2-4-6 | 5-7-12 | 8-11-17 | 10-15-23 | 12-18-29 | 15-21-34 | 16-25-40 | 18-28-45 | 20-31-49 | 23-35-55 |
| | | | 1-Way | 3-5-8 | 6-9-15 | 9-14-20 | 12-17-28 | 15-21-34 | 17-25-40 | 19-29-47 | 22-33-53 | 25-38-60 | 28-42-67 |
| 15 x 15 | 1.44 | CFM | | 145 | 290 | 430 | 575 | 720 | 860 | 1005 | 1150 | 1290 | 1435 |
| | | Noise Criteria | | — | — | 15 | 23 | 29 | 33 | 37 | 40 | 43 | 46 |
| | | Throw | 4-Way | 2-4-6 | 4-6-10 | 7-10-16 | 9-13-20 | 10-16-24 | 12-18-29 | 15-21-34 | 16-23-38 | 17-26-38 | 19-29-47 |
| | | | 3-Way | 2-4-6 | 5-7-11 | 7-11-16 | 9-14-21 | 11-16-28 | 13-19-31 | 15-22-36 | 17-25-41 | 19-27-46 | 21-31-50 |
| | | | 2-Way | 3-4-7 | 5-8-13 | 8-12-18 | 10-16-24 | 12-18-29 | 15-21-35 | 17-25-41 | 19-28-46 | 21-32-51 | 24-36-57 |
| | | | 1-Way | 3-5-8 | 6-9-15 | 10-14-22 | 12-17-28 | 15-21-35 | 17-26-42 | 20-30-49 | 22-34-54 | 25-38-61 | 28-43-68 |
| 16 x 16 | 1.64 | CFM | | 165 | 330 | 490 | 655 | 820 | 985 | 1150 | 1315 | 1480 | 1640 |
| | | Noise Criteria | | — | — | 16 | 24 | 29 | 34 | 38 | 41 | 44 | 47 |
| | | Throw | 4-Way | 2-4-6 | 5-7-11 | 7-10-16 | 9-13-20 | 11-16-25 | 13-18-30 | 15-21-35 | 16-24-39 | 18-27-44 | 20-30-49 |
| | | | 3-Way | 2-4-6 | 5-7-12 | 7-11-16 | 10-14-22 | 12-17-27 | 14-20-32 | 16-23-38 | 17-26-43 | 19-30-48 | 21-33-52 |
| | | | 2-Way | 3-4-7 | 5-8-13 | 8-12-18 | 10-16-24 | 13-19-31 | 15-22-36 | 17-26-42 | 19-29-46 | 22-33-53 | 24-36-58 |
| | | | 1-Way | 3-5-8 | 7-10-16 | 10-14-22 | 12-18-29 | 15-22-36 | 17-26-43 | 20-31-49 | 23-35-49 | 26-40-63 | 29-45-71 |
| 18 x 18 | 2.10 | CFM | | 210 | 420 | 630 | 840 | 1050 | 1260 | 1470 | 1680 | 1890 | 2100 |
| | | Noise Criteria | | — | — | 17 | 25 | 30 | 35 | 39 | 42 | 45 | 48 |
| | | Throw | 4-Way | 2-4-6 | 5-7-12 | 8-11-17 | 10-14-22 | 12-17-27 | 14-20-33 | 16-23-43 | 17-26-43 | 19-30-48 | 22-33-53 |
| | | | 3-Way | 3-4-7 | 5-8-13 | 8-12-18 | 10-16-24 | 12-18-29 | 15-21-35 | 17-25-41 | 19-28-46 | 21-32-51 | 24-36-57 |
| | | | 2-Way | 3-4-7 | 6-9-14 | 9-13-20 | 12-17-29 | 14-20-33 | 17-24-39 | 18-28-45 | 21-31-50 | 24-36-57 | 27-40-64 |
| | | | 1-Way | 4-6-9 | 7-11-16 | 10-16-24 | 14-20-32 | 16-24-39 | 20-39-47 | 22-33-53 | 25-38-60 | 28-43-68 | 32-49-78 |
| 21 x 21 | 2.88 | CFM | | 290 | 575 | 865 | 1155 | 1440 | 1730 | 2020 | 2305 | 2595 | 2885 |
| | | Noise Criteria | | — | — | 19 | 27 | 32 | 37 | 41 | 44 | 47 | 50 |
| | | Throw | 4-Way | 3-4-7 | 5-8-13 | 8-12-18 | 11-16-25 | 13-18-30 | 15-22-36 | 17-26-42 | 19-30-48 | 22-34-53 | 25-38-60 |
| | | | 3-Way | 3-4-7 | 6-9-14 | 9-13-20 | 11-16-26 | 14-20-33 | 16-24-39 | 18-28-45 | 21-31-50 | 24-37-57 | 27-40-64 |
| | | | 2-Way | 3-5-8 | 7-10-16 | 10-15-23 | 12-18-29 | 16-23-37 | 18-27-44 | 20-31-49 | 23-35-56 | 26-41-63 | 29-45-71 |
| | | | 1-Way | 4-6-10 | 8-12-18 | 12-17-27 | 15-20-37 | 18-27-44 | 21-32-51 | 25-38-60 | 28-42-67 | 32-49-77 | 36-54-86 |

**Performance Notes:**

1. Pressures are expressed in inches of water gauge.

2. Throw values are given for terminal velocities of 150, 100 and 50 fpm, with a cooling temperature differential (ΔT) of 20°F and are based on surface mount units benefiting from the coanda effect. The blade settings were set for optimum discharge, parallel to the face of the grille, that have the outer blades closest to the frame set with an opening of 1/8" (3) and progressively wider spacing between blades away from the frame. (**Note:** The throw values may be increased or decreased by as much as 20% by changing the blade setting).

3. Blades in the full open position
   - reduce the Noise Criteria by 6.
   - multiply the Total Pressure x 0.3.

4. The Noise Criteria (NC) values are based on a room absorption of 10 dB, re $10^{-12}$ watts.

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