

LL-1 / ONE-WAY BLOW PATTERN

| Effective Area, Square Feet* | Nominal Duct Width, Inches | | | | | | | | | | |
|------------------------------|----------------------------|---------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| 0.043 | 3½ | Total Pressure | 0.003 | 0.008 | 0.014 | 0.022 | 0.032 | 0.043 | 0.057 | 0.071 | 0.089 |
| | | cfm per foot | 21 | 32 | 42 | 53 | 64 | 74 | 85 | 95 | 106 |
| | | NC (Noise Criteria) | - | 14 | 21 | 27 | 31 | 35 | 38 | 41 | 44 |
| | | Throw, Ceiling | 6-9-14 | 9-12-18 | 11-14-20 | 13-16-23 | 14-18-25 | 15-19-27 | 17-20-29 | 18-21-30 | 18-23-32 |
| | | Feet, Side Wall | 4-6-12 | 6-9-16 | 8-12-19 | 10-15-21 | 12-16-23 | 14-18-25 | 15-19-27 | 16-20-28 | 17-21-30 |
| 0.072 | 4¼ | Total Pressure | 0.005 | 0.012 | 0.021 | 0.032 | 0.046 | 0.062 | 0.082 | 0.104 | 0.127 |
| | | cfm per foot | 30 | 46 | 61 | 76 | 91 | 106 | 122 | 137 | 152 |
| | | NC (Noise Criteria) | - | 17 | 24 | 29 | 34 | 38 | 41 | 44 | 47 |
| | | Throw, Ceiling | 6-9-17 | 10-14-21 | 13-17-24 | 16-19-27 | 17-21-30 | 18-23-32 | 20-24-34 | 21-26-36 | 22-27-38 |
| | | Feet, Side Wall | 4-7-13 | 7-10-20 | 9-13-22 | 11-17-25 | 13-19-27 | 16-21-30 | 18-22-32 | 19-24-34 | 20-25-35 |
| 0.106 | 5 | Total Pressure | 0.006 | 0.015 | 0.026 | 0.040 | 0.057 | 0.079 | 0.103 | 0.129 | 0.159 |
| | | cfm per foot | 40 | 61 | 81 | 101 | 121 | 142 | 162 | 182 | 202 |
| | | NC (Noise Criteria) | - | 18 | 25 | 30 | 35 | 39 | 42 | 45 | 48 |
| | | Throw, Ceiling | 7-10-20 | 10-16-24 | 14-20-28 | 17-22-31 | 20-24-34 | 21-26-37 | 23-28-40 | 24-30-42 | 26-31-44 |
| | | Feet, Side Wall | 4-7-15 | 7-11-22 | 10-15-26 | 12-18-29 | 15-22-32 | 17-24-34 | 20-26-37 | 22-27-39 | 24-29-41 |
| 0.136 | 5¾ | Total Pressure | 0.008 | 0.019 | 0.033 | 0.052 | 0.074 | 0.101 | 0.133 | 0.168 | 0.207 |
| | | cfm per foot | 52 | 79 | 105 | 131 | 157 | 183 | 210 | 236 | 262 |
| | | NC (Noise Criteria) | - | 20 | 27 | 32 | 37 | 41 | 44 | 47 | 50 |
| | | Throw, Ceiling | 8-12-22 | 12-18-28 | 16-23-32 | 20-25-36 | 23-28-39 | 24-30-42 | 26-32-45 | 28-34-48 | 29-36-50 |
| | | Feet, Side Wall | 4-8-17 | 8-13-25 | 11-17-29 | 14-21-33 | 17-25-36 | 20-28-39 | 22-29-42 | 25-31-44 | 27-33-47 |
| 0.169 | 6½ | Total Pressure | 0.010 | 0.023 | 0.041 | 0.065 | 0.093 | 0.127 | 0.166 | 0.219 | 0.259 |
| | | cfm per foot | 67 | 100 | 133 | 167 | 200 | 234 | 267 | 307 | 334 |
| | | NC (Noise Criteria) | 11 | 21 | 28 | 34 | 39 | 42 | 46 | 49 | 52 |
| | | Throw, Ceiling | 9-14-25 | 14-20-31 | 18-25-36 | 23-28-40 | 25-31-44 | 27-34-48 | 29-36-51 | 31-39-55 | 33-40-57 |
| | | Feet, Side Wall | 5-10-19 | 10-14-29 | 13-19-33 | 16-24-37 | 19-29-41 | 22-31-44 | 26-33-47 | 29-36-50 | 30-37-53 |
| 0.231 | 8 | Total Pressure | 0.013 | 0.028 | 0.050 | 0.079 | 0.109 | 0.155 | 0.196 | 0.262 | 0.309 |
| | | cfm per foot | 90 | 135 | 180 | 225 | 265 | 315 | 355 | 410 | 445 |
| | | NC (Noise Criteria) | 11 | 21 | 29 | 34 | 39 | 43 | 46 | 50 | 52 |
| | | Throw, Ceiling | 10-16-30 | 16-24-36 | 21-30-42 | 26-33-47 | 29-36-51 | 32-39-55 | 34-41-59 | 36-45-63 | 38-46-66 |
| | | Feet, Side Wall | 6-11-22 | 11-17-33 | 15-22-39 | 18-28-43 | 22-33-47 | 26-36-51 | 29-38-54 | 34-41-58 | 35-43-61 |
| 0.296 | 9½ | Total Pressure | 0.014 | 0.032 | 0.058 | 0.092 | 0.134 | 0.184 | 0.231 | 0.296 | 0.368 |
| | | cfm per foot | 115 | 170 | 230 | 290 | 350 | 410 | 460 | 520 | 580 |
| | | NC (Noise Criteria) | 11 | 21 | 29 | 35 | 39 | 43 | 46 | 49 | 52 |
| | | Throw, Ceiling | 12-18-33 | 17-26-41 | 24-33-47 | 30-37-53 | 34-41-58 | 36-45-63 | 39-47-67 | 41-50-71 | 43-53-75 |
| | | Feet, Side Wall | 6-13-25 | 12-18-37 | 17-25-44 | 21-32-49 | 25-38-54 | 30-41-58 | 33-44-62 | 38-46-66 | 40-49-69 |
| 0.389 | 11¾ | Total Pressure | 0.019 | 0.040 | 0.072 | 0.116 | 0.160 | 0.219 | 0.344 | 0.375 | 0.440 |
| | | cfm per foot | 160 | 235 | 315 | 400 | 470 | 550 | 690 | 720 | 780 |
| | | NC (Noise Criteria) | 12 | 22 | 29 | 35 | 39 | 43 | 49 | 50 | 52 |
| | | Throw, Ceiling | 14-22-39 | 21-32-48 | 28-39-55 | 36-44-62 | 39-48-67 | 42-52-73 | 47-58-82 | 48-59-83 | 50-61-87 |
| | | Feet, Side Wall | 8-15-30 | 15-22-44 | 20-30-51 | 25-38-58 | 30-44-62 | 35-48-67 | 44-53-76 | 45-55-77 | 46-57-80 |

LL-2 / TWO-WAY BLOW PATTERN

| Effective Area, Square Feet* | Nominal Duct Width, Inches | | | | | | | | | | |
|------------------------------|----------------------------|---------------------|---------|----------|----------|----------|----------|----------|----------|----------|----------|
| 0.101 | 6¼ | Total Pressure | 0.005 | 0.012 | 0.021 | 0.033 | 0.047 | 0.064 | 0.084 | 0.105 | 0.131 |
| | | cfm per foot | 41 | 62 | 82 | 103 | 124 | 144 | 165 | 185 | 206 |
| | | NC (Noise Criteria) | - | 18 | 25 | 31 | 35 | 39 | 42 | 45 | 48 |
| | | Throw, Ceiling | 5-8-14 | 8-12-17 | 10-14-19 | 12-15-22 | 14-17-24 | 15-18-25 | 16-19-27 | 17-20-29 | 18-22-30 |
| 0.157 | 7¾ | Total Pressure | 0.008 | 0.018 | 0.031 | 0.049 | 0.070 | 0.095 | 0.125 | 0.158 | 0.195 |
| | | cfm per foot | 62 | 94 | 125 | 156 | 187 | 218 | 250 | 281 | 312 |
| | | NC (Noise Criteria) | - | 21 | 28 | 33 | 38 | 42 | 45 | 48 | 51 |
| | | Throw, Ceiling | 6-9-17 | 9-14-21 | 13-17-24 | 15-19-26 | 17-21-29 | 18-22-31 | 19-24-34 | 21-25-36 | 22-26-37 |
| 0.213 | 9¼ | Total Pressure | 0.010 | 0.022 | 0.040 | 0.062 | 0.089 | 0.125 | 0.159 | 0.201 | 0.248 |
| | | cfm per foot | 84 | 126 | 168 | 210 | 252 | 294 | 336 | 378 | 420 |
| | | NC (Noise Criteria) | 12 | 22 | 29 | 35 | 39 | 43 | 46 | 49 | 52 |
| | | Throw, Ceiling | 7-11-19 | 11-16-24 | 15-19-27 | 18-22-31 | 19-24-34 | 17-21-30 | 22-27-39 | 24-29-41 | 25-31-43 |
| 0.269 | 10¾ | Total Pressure | 0.012 | 0.027 | 0.048 | 0.074 | 0.107 | 0.146 | 0.190 | 0.241 | 0.297 |
| | | cfm per foot | 107 | 160 | 214 | 267 | 320 | 374 | 427 | 481 | 534 |
| | | NC (Noise Criteria) | 13 | 23 | 30 | 35 | 40 | 44 | 47 | 50 | 52 |
| | | Throw, Ceiling | 8-12-22 | 12-19-27 | 17-22-31 | 20-25-35 | 22-27-38 | 24-29-41 | 25-31-44 | 27-33-47 | 28-35-49 |
| 0.325 | 12¼ | Total Pressure | 0.014 | 0.031 | 0.055 | 0.086 | 0.125 | 0.169 | 0.221 | 0.270 | 0.345 |
| | | cfm per foot | 131 | 197 | 262 | 328 | 394 | 459 | 525 | 580 | 656 |
| | | NC (Noise Criteria) | 13 | 23 | 30 | 36 | 40 | 44 | 47 | 50 | 53 |
| | | Throw, Ceiling | 9-14-24 | 14-21-30 | 18-24-34 | 22-27-38 | 24-30-42 | 26-32-45 | 28-34-49 | 29-36-51 | 31-38-54 |

PERFORMANCE DATA

- All pressures are in inches of water
- Throw velocities are given for isothermal terminal velocities of 150, 100 and 50 fpm. For an explanation of data, see the Engineering Guidelines section.
- Throw values are based on an active section 4 feet long. Multipliers for correcting the throw for other lengths are shown in the following table
- NC values are based on a room absorption of 10 dB, re 10⁻¹² watts, with a 4-foot active diffuser section. Corrections for other lengths are shown in the table below.
- When the diffuser is used as a return intake, the NC value is increased by 4, and the negative static pressure is 0.8 times the listed total pressure

- Dash (-) in space denotes an NC value less than 10
- For continuous lengths, the selection for NC is usually based on a 10-foot section
- These products have been tested per ANSI/ASHRAE Standard 70-2006. Actual performance, with flexible duct inlet, may vary in the field. See the Engineering Guidelines section of this catalog for additional information.
- An asterisk (*) indicates effective free area per linear foot

Throw Correction for Length (multiply)

| | | | | |
|--------------------|------|---|-----|-----|
| Active Length (ft) | 2 | 4 | 8 | 10 |
| Throw Correction | 0.72 | 1 | 1.5 | 1.7 |

NC Correction for Length (add)

| | | | | | |
|--------------------|----|---|---|---|----|
| Active Length (ft) | 2 | 4 | 6 | 8 | 10 |
| NC Correction | -3 | 0 | 2 | 3 | 5 |