

XG-AFL FORMATIONS PERFORMANCE DATA
PRESSURIZED CEILING PLENUM WITH COMBO BLADE PATTERN CONTROLLER
VERTICAL FLOW

| | | | | | | | | | | |
|-----------------|--------|--------|---------|---------|----------|----------|----------|----------|----------|----------|
| 1" Slot Width | 1 Slot | CFM/LF | 50 | 75 | 100 | 120 | 140 | 160 | 180 | 200 |
| | | Ps | .033 | .074 | .131 | .189 | .257 | .335 | .424 | .524 |
| | | NC | - | 20 | 25 | 29 | 32 | 34 | 36 | 38 |
| | | Throw | 3-11-18 | 4-15-22 | 5-18-25 | 6-19-27 | 7-21-29 | 9-22-31 | 10-24-33 | 11-25-35 |
| | 2 Slot | CFM/LF | 75 | 115 | 150 | 180 | 210 | 240 | 270 | 300 |
| | | Ps | .022 | .052 | .089 | .128 | .174 | .227 | .287 | .355 |
| | | NC | - | 18 | 23 | 26 | 29 | 32 | 34 | 36 |
| | | Throw | 3-12-22 | 4-18-27 | 6-22-30 | 7-24-33 | 8-26-36 | 9-27-39 | 10-29-41 | 11-30-43 |
| 1.5" Slot Width | 1 Slot | CFM/LF | 65 | 95 | 125 | 150 | 175 | 200 | 225 | 250 |
| | | Ps | .027 | .068 | .100 | .145 | .197 | .257 | .326 | .402 |
| | | NC | - | 18 | 24 | 27 | 30 | 33 | 35 | 37 |
| | | Throw | 3-12-20 | 4-17-24 | 5-20-28 | 7-22-30 | 8-23-33 | 9-25-35 | 10-26-37 | 11-28-39 |
| | 2 Slot | CFM/LF | 110 | 160 | 215 | 255 | 300 | 340 | 385 | 425 |
| | | Ps | .023 | .049 | .089 | .125 | .174 | .223 | .286 | .349 |
| | | NC | - | 18 | 24 | 27 | 30 | 32 | 35 | 37 |
| | | Throw | 3-14-26 | 5-21-31 | 7-26-36 | 8-28-40 | 9-30-43 | 11-32-46 | 12-35-49 | 13-36-51 |
| 2" Slot Width | 1 Slot | CFM/LF | 100 | 150 | 200 | 240 | 280 | 320 | 360 | 400 |
| | | Ps | .039 | .089 | .158 | .227 | .309 | .403 | .511 | .630 |
| | | NC | - | 22 | 27 | 31 | 33 | 36 | 38 | 40 |
| | | Throw | 4-16-25 | 6-22-30 | 8-25-35 | 9-27-39 | 11-29-42 | 12-31-45 | 14-33-47 | 15-35-50 |
| | 2 Slot | CFM/LF | 150 | 225 | 300 | 360 | 420 | 480 | 540 | 600 |
| | | Ps | .027 | .060 | .106 | .153 | .208 | .272 | .344 | .425 |
| | | NC | - | 19 | 25 | 28 | 31 | 34 | 36 | 38 |
| | | Throw | 4-17-30 | 6-25-37 | 8-30-43 | 10-33-47 | 11-36-51 | 13-39-55 | 14-41-58 | 16-43-61 |
| 2.5" Slot Width | 1 Slot | CFM/LF | 125 | 190 | 250 | 300 | 350 | 400 | 450 | 500 |
| | | Ps | .041 | .095 | .164 | .237 | .322 | .421 | .533 | .658 |
| | | NC | - | 22 | 27 | 31 | 33 | 36 | 38 | 40 |
| | | Throw | 4-18-28 | 6-24-34 | 8-28-39 | 10-30-43 | 12-33-47 | 13-35-50 | 15-37-53 | 17-39-56 |
| | 2 Slot | CFM/LF | 190 | 285 | 375 | 450 | 525 | 600 | 675 | 750 |
| | | Ps | .028 | .064 | .111 | .160 | .217 | .284 | .359 | .443 |
| | | NC | - | 19 | 25 | 28 | 31 | 34 | 36 | 38 |
| | | Throw | 5-19-34 | 7-29-42 | 9-34-48 | 11-37-53 | 13-40-57 | 14-43-61 | 16-46-65 | 18-48-68 |
| 3" Slot Width | 1 Slot | CFM/LF | 150 | 225 | 300 | 360 | 420 | 480 | 540 | 600 |
| | | Ps | .047 | .106 | .189 | .272 | .370 | .484 | .612 | .756 |
| | | NC | - | 22 | 27 | 31 | 33 | 36 | 38 | 40 |
| | | Throw | 5-19-30 | 7-26-37 | 9-30-43 | 11-33-47 | 13-36-51 | 15-39-55 | 17-41-58 | 18-43-61 |
| | 2 Slot | CFM/LF | 225 | 340 | 450 | 540 | 630 | 720 | 810 | 900 |
| | | Ps | .032 | .073 | .128 | .184 | .250 | .327 | .413 | .510 |
| | | NC | - | 19 | 25 | 28 | 31 | 34 | 36 | 38 |
| | | Throw | 5-21-37 | 7-31-46 | 10-37-53 | 12-41-58 | 14-44-62 | 16-47-67 | 18-50-71 | 20-53-75 |

PERFORMANCE NOTES FOR XG-AFL FORMATIONS SERIES

All data is tested in accordance with ANSI/ASHRAE 70-2006.

DEFINITION OF UNITS

CFM Cubic Feet per Minute (air)

CFM/LF Cubic Feet per Minute per Linear Foot (air)

Velocity Velocity of air stream in Feet per Minute

Ps Negative static pressure (inches of water column)

NC Noise criterion, sound pressure level NC ratings are based on sound power level (Lw) re: 10^{-12} watts minus a 10dB room attenuation in all octave bands

1. All pressures are given in inches of water.
2. Isothermal throws are given for velocities of 150, 100 and 50 FPM.
3. Throw values are based on a 1-way discharge from the slot with the controller set at 0 discharge. For 2-way discharges, throw is based upon the number and size of the slots throwing in each direction, with the total supply air flow split equally between all slots in the unit.
4. Data was collected in accordance to ASHRAE Standard 70-2006 "Method of Testing for Rating the Performance of Air Outlets and Inlets"
5. Correction factor tables are only to be used with continuous pressurized ceiling plenum performance data.

Table 1. NC Correction For Length

| Length (feet) | 2 | 4 | 6 | 8 | 10 |
|---------------|----|----|----|----|----|
| Supply | -2 | +0 | +2 | +3 | +5 |
| Return | +0 | +3 | +5 | +6 | +8 |

Table 2. Throw Correction Multiplier For Length

| Length (feet) | 2 | 4 | 8 | 10 | 12 |
|------------------|------|---|-----|-----|-----|
| Throw Correction | 0.72 | 0 | 1.5 | 1.7 | 1.8 |