

Model: SG-SD Maximum Security Grilles

Airflow Measurements Procedure

1. Record and average at least four velocity readings taken in approximately equal areas of the grille.
2. Calculate the core area using the following equation.

$$\text{Core Area} = \{[\text{Listed Width} - 13/16 \text{ inch}] \times [\text{Listed Height} - 13/16 \text{ inch}]\} / 144$$

Note: Use 144 as the divisor when the listed width and height are shown in inches. Common core areas are provided in the following table.

3. Calculate flow rate using the following equation.

$$\text{Flow Rate: CFM} = A_K \times (\text{Average Velocity}) \times (\text{Core Area})$$

SG-SD Air Flow Factors

Neck Size (inches)	Neck Area (sq. ft.)	Core Area Factor A_K
6 x 6	0.25	0.09
9 x 9	0.56	0.21
12 x 12	1	0.39
18 x 18	2.25	0.94
24 x 24	4	1.74
30 x 30	6.25	2.8

Alnor Probe
6070, 6000, 2220 or 2220-A

