

## Air Flow Factors

## Model: Door Return Grille (CT-700 and T-700)

## **Airflow Measurements Procedure**

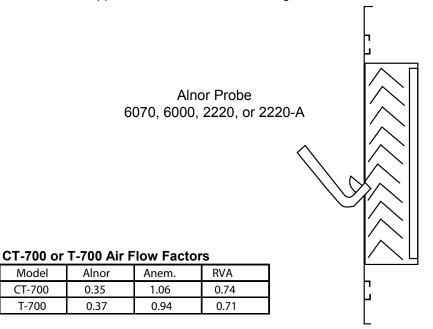
- 1. Obtain the velocity readings as shown in the figure using an Alnor velometer.
- 2. Calculate the core area using the following equation.
  - Core Area = [{Listed Width 5/8 inch} x {Listed Height 5/8 inch}] / 144

Note: Use 144 as the divisor when the listed width and height are shown in inches.

- 3. Record and average at least four velocity readings taken in approximately equal areas.
- 4. Calculate airflow rate using the following equation.

Flow Rate: CFM = Factor x (Average Velocity) x (Core Area)

Note: Use applicable factor from the following tables.



## T700 and CT70 Core Area (Square Feet Factors)

1700 and 0170 Gote Area (Oquale 1 cet 1 doto15)										
Len gth	Width (inches)									
(inches )	6	8	10	12	14	16	18	20	24	30
6	0.19									
8	0.26	0.37								
10	0.34	0.47	0.59							
12	0.41	0.57	0.72	0.88						
14	0.48	0.67	0.85	1.04	1.22					
16	0.56	0.77	0.98	1.19	1.40	1.62				
18	0.63	0.87	1.11	1.35	1.59	1.83	2.07			
20	0.70	0.97	1.24	1.50	1.77	2.04	2.31	2.57		
22	0.77	1.07	1.37	1.66	1.96	2.25	2.55	2.84		
24	0.85	1.17	1.49	1.82	2.14	2.46	2.79	3.11	3.75	
30	1.07	1.47	1.88	2.29	2.69	3.10	3.50	3.91	4.72	5.94



Note: Refer to the Air Balancing Application Guide for more information about balancing air systems.