

Air Flow Factors

Model: Reversible Core Narrow Blade Grilles (1700)

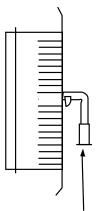
Airflow Measurements Procedure

- 1. Obtain the required velocity readings by positioning an Alnor Velometer probe as shown below. Hold the anemometer against the vanes for an accurate reading.
- 2. Record and average the velocity readings in equal areas over the face of the grille.

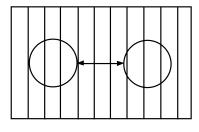
Note: If using a rotating vane anemometer, obtain an average reading by moving the anemometer over the grille face at a uniform rate or by holding the anemometer at various spots for equal time increments of at least one minute.

3. Calculate airflow rate using the following equation, plus the factor and core area tables provided.

Flow Rate: CFM = Factor x Average Velocity x Core Area.



Alnor Velometer 6070, 6000, 2220, or 2220-A



Rotating Vane (RVA)

1700 Grille Factors

Models	Deflection	Sup	ply	Return		
	(Degrees)	Alnor	RVA	Alnor	RVA	
All	0	0.74	0.73	0.56	0.55	
1707, 1707-35	45	0.67	0.73	-	0.55	

Note: RVA readings are velocity per minute.

1700 Core Area

Width (inches)	Length (inches)										
	4	5	6	8	10	12	14	16	18	20	24
6			0.18								
7		0.18									
8	0.18		0.26	0.39							
10		0.26	0.34		0.60						
12	0.26	0.34	0.39	0.60	0.69	0.90					
14		0.39		0.69	0.81	1.07	1.18				
16	0.34		0.52	0.81	0.90	1.18	1.34	1.60			
18	0.39	0.52	0.60	0.90	1.07	1.34	1.60	1.80	2.08		
20		0.60	0.69		1.18		1.80	2.08	2.45	2.45	
22			0.81			1.60				2.78	
24	0.52	0.69		1.18	1.60	1.80	2.08	2.45	2.78	3.11	3.61
26			0.90				2.45	2.78	3.11		
28	0.60	0.81									
30	0.69	0.90	1.07	1.60	1.80	2.08	2.78	3.11	3.61		4.65
32						2.45					
34			1.18								
36	0.81	1.07	1.34	1.80	2.08	2.78	3.11	3.61		4.65	5.58
40	0.90			2.08		3.11					
48	1.07	1.34	1.80	2.45	3.11	3.61		4.65	5.58		
60	1.34	1.80	3.61		3.61		5.58				
72	1.60				4.65	5.58					



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