

## PERFORMANCE DATA:

### DOOR/TRANSFER GRILLES – 5100 AND 6100 SERIES

#### MODELS: 51DG, 61DG

Listed Duct Size (inches)	Alternate Sizes (inches)	Core Area (sq. ft.)	Ak Factor	Core Velocity Velocity Pressure Neg. Static Pressure	100	150	200	250	300	350	400	450
					.001 .005	.001 .012	.002 .021	.004 .033	.006 .048	.008 .065	.010 .085	.013 .108
6 x 6	8 x 4 10 x 4	0.18	0.25	CFM	18	27	36	45	54	63	72	81
				Noise Criteria	–	–	–	18	22	25	28	30
8 x 6	12 x 4	0.25	0.33	CFM	25	38	50	63	75	88	100	113
				Noise Criteria	–	–	–	19	23	26	29	31
10 x 6	16 x 4	0.32	0.41	CFM	32	48	64	80	96	112	128	144
				Noise Criteria	–	–	15	20	24	27	30	33
8 x 8		0.35	0.44	CFM	35	53	70	88	105	123	140	158
				Noise Criteria	–	–	15	20	24	27	30	32
12 x 6	18 x 4	0.40	0.50	CFM	40	60	80	100	120	140	160	180
				Noise Criteria	–	–	16	21	25	28	31	33
12 x 8	16 x 6 24 x 4	0.55	0.66	CFM	58	83	110	138	165	193	220	248
				Noise Criteria	–	–	17	22	26	29	32	34
10 x 10	26 x 4	0.58	0.69	CFM	61	87	116	145	174	203	232	261
				Noise Criteria	–	–	17	22	26	29	32	35
12 x 10	16 x 8 20 x 6	0.70	0.82	CFM	74	105	140	175	210	245	280	315
				Noise Criteria	–	–	19	23	27	30	33	36
12 x 12	14 x 10 24 x 6 18 x 8	0.86	0.99	CFM	90	129	172	215	258	301	344	387
				Noise Criteria	–	–	20	24	28	31	34	36
14 x 14	16 x 12 24 x 8 20 x 10 34 x 6	1.20	1.35	CFM	124	180	240	300	420	420	480	540
				Noise Criteria	–	15	21	25	29	32	35	37
18 x 12	16 x 14 28 x 8 22 x 10	1.32	1.49	CFM	132	198	264	330	396	462	528	594
				Noise Criteria	–	16	22	26	30	33	36	38
16 x 16	18 x 14 30 x 8 22 x 12	1.59	1.76	CFM	159	239	318	398	477	557	636	716
				Noise Criteria	–	16	22	27	32	34	36	39
24 x 12	18 x 16 30 x 10 20 x 14	1.79	1.98	CFM	179	269	358	448	537	627	716	806
				Noise Criteria	–	17	23	28	33	35	37	40
18 x 18	20 x 16 28 x 12 24 x 14 32 x 10	2.04	2.23	CFM	204	306	408	510	612	714	816	918
				Noise Criteria	–	18	24	29	34	36	38	41
30 x 12	20 x 18 26 x 14 22 x 16 36 x 10	2.25	2.48	CFM	225	338	450	563	675	788	900	1013
				Noise Criteria	–	18	24	29	34	36	38	41
20 x 20	24 x 18 30 x 14 26 x 16 36 x 12	2.54	2.75	CFM	254	381	508	635	762	889	1016	1143
				Noise Criteria	–	19	25	30	35	43	39	42
22 x 22	24 x 20 30 x 16 26 x 18 36 x 14	3.10	3.33	CFM	310	465	620	775	930	1085	1240	1395
				Noise Criteria	–	19	25	30	35	38	40	43
30 x 18	24 x 22 40 x 14 34 x 16	3.46	3.71	CFM	346	519	692	865	1038	1211	1384	1557
				Noise Criteria	–	20	26	30	35	38	40	43
24 x 24	26 x 22 32 x 18 28 x 20 36 x 16	3.71	3.96	CFM	371	557	742	928	1113	1299	1484	1670
				Noise Criteria	–	20	26	30	35	38	41	44
36 x 18	32 x 20 46 x 14 40 x 16	4.18	4.46	CFM	418	627	836	1045	1254	1463	1672	1881
				Noise Criteria	–	20	26	30	35	39	41	44
26 x 26	28 x 24	4.38	4.65	CFM	438	657	876	1095	1314	1533	1752	1971
				Noise Criteria	–	20	27	31	36	39	41	44
30 x 24	28 x 26 36 x 20 32 x 22	4.68	4.95	CFM	468	702	936	1170	1404	1638	1872	2106
				Noise Criteria	–	21	27	31	36	39	41	44
28 x 28	30 x 26 36 x 22	5.11	5.39	CFM	511	767	1022	1278	1533	1789	2044	2300
				Noise Criteria	–	21	28	32	37	40	42	45
36 x 24	30 x 28	5.64	5.94	CFM	564	846	1128	1410	1692	1974	2256	2538
				Noise Criteria	–	22	28	32	37	40	42	45
30 x 30	34 x 26	5.89	6.19	CFM	589	884	1178	1473	1767	2062	2356	2651
				Noise Criteria	–	22	28	32	37	40	42	45

#### Performance Notes:

1. All pressures are in inches w.g..
2. Core Velocity is in feet per minute.
3. Ak balancing factors are based on an Alnor velometer with a 2220A or 6070P Jet Probe.

Position probe 1" (25) out from face of grille and take the average of several readings at various positions.

$$\text{Airflow (CFM)} = \text{Average Velocity (V}_k\text{)} \times \text{A}_k$$

4. Noise Criteria (NC) values are based on a room absorption of 10 dB, re 10<sup>-12</sup> watts. Dash (–) in space denotes a Noise Criteria level of less than 15.
5. Data derived from tests conducted in accordance with ANSI/ASHRAE Standard 70 – 2006.