



# ENGINEERING DATA

## SG700

Nom. Duct Size (in.)	Nom. Duct Area (ft <sup>2</sup> )	Face Free Area (ft <sup>2</sup> )	Core Velocity (fpm)	300	400	500	600	700	800	1000	1100	1200
			Velocity Pressure	0.006	0.010	0.016	0.022	0.031	0.040	0.062	0.075	0.090
			Total Pressure	0.038	0.068	0.107	0.154	0.209	0.273	0.427	0.517	0.615

6x6	0.25	0.19	Airflow (CFM)	56	75	93	112	131	149	187	205	224
			NC	-	12	19	25	29	33	40	43	46
			Throw, ft.	5-8-12	8-10-14	9-11-15	10-12-17	11-13-18	11-14-20	13-15-22	13-16-23	14-17-24

12x12	1.00	0.86	Airflow (CFM)	257	343	428	514	600	686	857	943	1028
			NC	-	19	26	31	36	40	47	50	52
			Throw, ft.	11-18-26	17-21-30	19-23-33	21-26-36	23-28-39	24-30-42	27-30-47	28-35-49	30-36-51

18x18	2.25	2.02	Airflow (CFM)	604	806	1007	1209	1410	1612	2015	2216	2418
			NC	14	23	30	35	40	44	50	53	56
			Throw, ft.	16-28-39	26-32-45	29-36-51	32-39-56	35-42-60	37-45-64	41-51-72	43-53-75	45-56-79

24x24	4.00	3.66	Airflow (CFM)	1098	1464	1830	2196	2562	2928	3660	4026	4392
			NC	17	25	32	38	42	46	53	56	58
			Throw, ft.	22-37-53	35-43-61	39-48-68	43-53-75	47-57-81	50-61-86	56-68-97	59-72-101	61-75-106

30x30	6.25	5.79	Airflow (CFM)	1738	2317	2896	3476	4055	4634	5793	6372	6951
			NC	19	27	34	40	44	48	55	58	60
			Throw, ft.	28-47-67	44-54-77	50-61-86	54-67-94	59-72-102	63-77-109	70-86-122	74-90-128	77-94-133

Notes:

1. Tests conducted in accordance with ANSI/ASHRAE Standard 70-1991.
2. Neck velocities are in feet per minute; pressures are in inches of water.
3. Data is based on supply conditions.
4. NC values are based on room absorption of 10dB.
5. The negative static pressure for return performance is equal to the total pressure of supply at the same CFM.
6. Return NC is 2 higher than supply NC at the same CFM.
7. Throw values (ft.) are for terminal velocities of 150, 100 and 50 fpm at isothermal conditions.
8. Dash (-) in space indicates NC value less than 10.