



# ENGINEERING DATA

## SG200-SD

Nom. Duct Size (in.)	Nom. Duct Area (ft <sup>2</sup> )	Area Factor A <sub>k</sub>	Neck Velocity	100	150	200	250	300	350	400	450	500	
			Velocity Pressure	0.001	0.001	0.002	0.004	0.006	0.008	0.010	0.013	0.016	
6x6	0.25	0.088	Airflow, CFM	25	38	50	63	75	88	100	113	125	
			Face Velocity (fpm)	225	338	451	564	676	789	902	1014	1127	
			Total Pressure	0.005	0.012	0.022	0.034	0.049	0.066	0.086	0.109	0.135	
			NC	-	-	-	-	-	-	11	14	18	
			Throw, ft.	1-2-8	2-4-13	3-8-17	5-11-21	8-13-23	10-15-25	11-17-27	13-19-28	14-21-30	
8x8	0.44	0.164	Airflow, CFM	44	67	89	111	133	155	178	200	222	
			Face Velocity (fpm)	212	318	424	530	636	742	848	953	1059	
			Total Pressure	0.005	0.011	0.020	0.031	0.045	0.062	0.080	0.102	0.126	
			NC	-	-	-	-	-	-	13	17	21	
			Throw, ft.	1-2-9	2-5-16	4-9-22	7-14-27	9-16-31	13-19-33	15-22-36	16-24-38	18-27-40	
10x10	0.69	0.265	Airflow, CFM	69	104	139	174	208	243	278	312	347	
			Face Velocity (fpm)	202	303	404	505	606	707	808	909	1009	
			Total Pressure	0.005	0.011	0.019	0.030	0.043	0.058	0.076	0.096	0.119	
			NC	-	-	-	-	-	-	11	16	20	23
			Throw, ft.	1-3-11	3-6-20	5-11-27	8-17-33	11-20-39	15-23-42	18-27-45	20-30-47	22-33-50	
12x12	1.00	0.392	Airflow, CFM	100	150	200	250	300	350	400	450	500	
			Face Velocity (fpm)	194	291	388	485	582	679	776	873	970	
			Total Pressure	0.005	0.010	0.018	0.028	0.041	0.055	0.072	0.092	0.113	
			NC	-	-	-	-	-	-	13	18	22	25
			Throw, ft.	1-3-12	3-7-23	6-12-31	9-19-39	12-23-46	17-27-50	21-31-53	23-35-57	26-39-60	
18x18	2.25	0.936	Airflow, CFM	225	338	450	563	675	788	900	1013	1125	
			Face Velocity (fpm)	178	267	356	445	533	622	711	800	889	
			Total Pressure	0.004	0.009	0.016	0.026	0.037	0.050	0.065	0.083	0.102	
			NC	-	-	-	-	-	12	17	22	26	29
			Throw, ft.	2-4-16	4-9-34	7-16-45	11-25-56	16-34-67	22-39-75	29-45-80	34-51-85	37-56-90	
24x24	4.00	1.736	Airflow, CFM	400	600	800	418	1200	1400	1600	1800	2000	
			Face Velocity (fpm)	167	251	334	418	501	585	668	752	836	
			Total Pressure	0.004	0.009	0.015	0.024	0.034	0.046	0.061	0.077	0.095	
			NC	-	-	-	-	15	20	25	29	32	
			Throw, ft.	2-5-20	5-11-44	9-20-58	14-31-73	20-44-87	27-51-100	35-58-107	44-65-113	48-73-120	
30x30	6.25	2.804	Airflow, CFM	625	938	1250	1563	1875	2188	2500	2813	3125	
			Face Velocity (fpm)	159	239	318	398	478	557	637	717	796	
			Total Pressure	0.004	0.008	0.014	0.022	0.032	0.044	0.057	0.073	0.090	
			NC	-	-	-	12	18	23	27	31	34	
			Throw, ft.	3-6-23	6-13-52	10-23-71	16-36-89	23-52-106	31-62-124	41-71-134	52-80-142	59-89-149	

**Notes:**

1. Tests conducted in accordance with ANSI/ASHRAE Standard 70-1991.
2. Pressures are in inches of water.
3. Data is based on supply performance.
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.