

PERFORMANCE DATA:

MODEL 6300R • IMPERIAL UNITS

Nominal Neck Size	Neck Velocity, FPM	400	500	600	700	800	900	1000	1200	1400	1600
	Velocity Pressure	.010	.016	.023	.031	.040	.051	.063	.090	.122	.160
6" Dia.	Total Pressure	.024	.037	.056	.071	.092	.112	.138	.197	.272	.345
	Airflow, CFM	80	100	120	140	160	180	200	235	275	315
	Radius of Diffusion, ft.	2-5	3-5	4-6	4-7	5-7	6-8	6-9	6-9	7-10	7-10
	Noise Criteria	—	—	12	17	21	25	28	34	39	41
8" Dia.	Total Pressure	.033	.049	.068	.095	.122	.155	.192	.270	.362	.470
	Airflow, CFM	140	175	210	245	280	315	350	420	490	560
	Radius of Diffusion, ft.	3-7	4-8	5-8	6-9	7-10	8-10	9-11	8-12	9-13	10-14
	Noise Criteria	—	—	14	19	23	27	30	36	41	44
10" Dia.	Total Pressure	.041	.062	.098	.121	.157	.200	.245	.350	.477	.610
	Airflow, CFM	220	270	330	380	435	490	545	655	765	870
	Radius of Diffusion, ft.	4-9	5-10	7-11	8-11	9-12	9-13	10-14	11-15	11-16	12-17
	Noise Criteria	—	10	16	21	25	29	32	38	43	46
12" Dia.	Total Pressure	.043	.066	.093	.127	.165	.206	.249	.355	.482	.620
	Airflow, CFM	315	390	470	550	630	705	785	940	1100	1255
	Radius of Diffusion, ft.	5-10	7-12	8-13	9-14	10-15	11-16	12-16	13-18	14-19	15-21
	Noise Criteria	—	12	18	23	27	31	34	40	45	48
16" Dia.	Total Pressure	.043	.060	.093	.127	.153	.206	.252	.350	.482	.580
	Airflow, CFM	560	700	840	980	1120	1260	1400	1680	1960	2240
	Radius of Diffusion, ft.	6-12	7-13	9-15	10-16	12-17	13-18	13-18	14-20	16-22	18-24
	Noise Criteria	—	16	22	27	31	35	38	44	49	52
18" Dia.	Total Pressure	.044	.068	.097	.130	.167	.214	.253	.370	.492	.630
	Airflow, CFM	710	885	1060	1240	1420	1590	1770	2120	2480	2830
	Radius of Diffusion, ft.	7-16	10-18	12-19	14-21	16-22	17-23	18-24	19-27	21-29	22-31
	Noise Criteria	—	17	23	28	32	36	39	45	50	53
20" Dia.	Total Pressure	.045	.069	.099	.135	.170	.215	.262	.375	.512	.645
	Airflow, CFM	875	1100	1310	1530	1750	1970	2190	2610	3060	3500
	Radius of Diffusion, ft.	8-18	11-19	14-21	15-23	17-24	18-26	19-27	21-30	23-32	24-34
	Noise Criteria	10	18	24	29	33	37	40	46	51	54
24" Dia.	Total Pressure	.043	.066	.095	.131	.170	.215	.267	.360	.407	.660
	Airflow, CFM	1260	1570	1880	2200	2510	2820	3140	3770	4400	5020
	Radius of Diffusion, ft.	10-21	13-23	16-25	18-28	21-29	22-31	25-36	25-36	28-39	29-42
	Noise Criteria	12	19	25	30	34	38	41	47	52	55

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CEILING DIFFUSERS

Performance Notes:

1. All pressures are in inches w.g.. To obtain static pressure, subtract the velocity pressure from the total pressure.
2. Radius of diffusion values are given at 100 and 50 fpm terminal velocities under isothermal conditions.
3. Performance data as shown is for the diffuser only, with the cones in the "down" position. Performance for the cones in the "up" position can be approximated by multiplying the total pressures by 1.6, adding 5 Noise Criteria to the sound levels, and multiplying the radius of diffusion by .90.

4. Noise Criteria (NC) values are based upon 10 dB room absorption, re 10⁻¹² watts. Dash (—) in space indicates an Noise Criteria of less than 10.
5. Data derived from tests conducted in accordance with ANSI/ASHRAE Standard 70 – 2006.

Neck Size Dia. in Inches	Ak Factor
6	0.120
8	0.200
10	0.310
12	0.440
14	0.570
16	0.785
18	0.990
20	1.220
24	1.770