

PERFORMANCE DATA:

MODEL 6600 • SQUARE NECK

Neck Size	Face Opening	Neck Velocity, FPM Velocity Pressure Airflow, CFM	160	240	320	400	600	800	1000	1200	1400
			.002 40	.004 60	.006 80	.010 100	.023 150	.040 200	.063 250	.090 300	.122 350
6 x 6	1 1/4"	Total Pressure				.03	.06	.10	.16	.23	.31
		Throw				1	3	5	6	7	9
		Noise Criteria				13	18	21	25	30	36
	1"	Total Pressure			.02	.03	.07	.11	.17	.26	.34
		Throw			2	2	4	6	7	8	10
		Noise Criteria			—	13	18	21	25	31	37
	3/4"	Total Pressure	.01	.01	.02	.03	.08	.13	.21	.30	.41
		Throw	2	2	3	3	5	7	8	9	10
		Noise Criteria	—	—	—	14	19	22	26	32	38
	1/2"	Total Pressure	.01	.02	.03	.05	.10	.18	.28	.41	.56
		Throw	3	3	4	4	6	8	9	10	11
		Noise Criteria	—	—	—	15	20	23	26	35	40

Neck Size	Face Opening	Neck Velocity, FPM Velocity Pressure Airflow, CFM	89	133	178	267	356	444	533	711	800
			.001 50	.001 75	.002 100	.004 150	.008 200	.012 250	.018 300	.031 400	.040 450
9 x 9	1 1/4"	Total Pressure				.01	.02	.04	.06	.10	.12
		Throw				2	3	5	6	8	9
		Noise Criteria				12	17	20	23	32	37
	1"	Total Pressure			.01	.02	.03	.05	.07	.12	.15
		Throw			2	4	5	6	7	10	11
		Noise Criteria			—	13	18	21	24	33	39
	3/4"	Total Pressure		.01	.01	.03	.04	.07	.10	.17	.21
		Throw		2	3	5	6	7	9	11	13
		Noise Criteria		—	—	14	19	22	25	35	40
	1/2"	Total Pressure	.01	.01	.02	.04	.07	.12	.17	.29	.37
		Throw	2	3	4	6	7	9	10	13	14
		Noise Criteria	—	—	—	15	20	23	26	37	42

Neck Size	Face Opening	Neck Velocity, FPM Velocity Pressure Airflow, CFM	50	100	150	200	250	300	400	500	600
			.001 50	.001 100	.002 150	.003 200	.004 250	.006 300	.010 400	.016 500	.023 550
12 x 12	1 1/4"	Total Pressure			.01	.01	.02	.03	.04	.07	.09
		Throw			3	4	6	7	9	12	13
		Noise Criteria			—	13	17	21	26	33	38
	1"	Total Pressure		.01	.01	.02	.03	.04	.06	.09	.12
		Throw		2	4	5	7	8	10	13	14
		Noise Criteria		—	—	13	17	21	26	34	38
	3/4"	Total Pressure		.01	.01	.03	.04	.06	.09	.15	.18
		Throw		3	5	6	7	9	11	14	15
		Noise Criteria		—	—	14	18	22	27	35	40
	1/2"	Total Pressure	.01	.01	.03	.05	.07	.10	.18	.28	.34
		Throw	2	4	6	7	8	10	12	15	17
		Noise Criteria	—	—	—	15	20	23	30	39	45

For performance notes, see D137.

D

CEILING DIFFUSERS

PERFORMANCE DATA:

MODEL 6600 • SQUARE NECK

Neck Size	Face Opening	Neck Velocity, FPM Velocity Pressure Airflow, CFM	32	64	96	128	192	256	320	384	448
			.001 50	.001 100	.001 150	.001 200	.002 300	.004 400	.006 500	.009 600	.013 700
15 X 15	1 1/4"	Total Pressure				.01	.01	.03	.05	.06	.09
		Throw				3	5	6	9	10	12
		Noise Criteria				—	18	22	27	33	39
	1"	Total Pressure			.01	.01	.02	.04	.06	.09	.12
		Throw			2	4	6	8	11	13	14
		Noise Criteria			—	13	19	23	28	35	42
	3/4"	Total Pressure		.01	.01	.02	.03	.07	.10	.14	.19
		Throw		2	4	5	8	10	13	15	17
		Noise Criteria		—	—	—	15	21	26	32	40
	1/2"	Total Pressure	.01	.01	.02	.03	.07	.13	.20	.28	.38
		Throw	2	3	5	6	9	12	15	18	21
		Noise Criteria	—	—	—	15	21	26	32	40	49

Neck Size	Face Opening	Neck Velocity, FPM Velocity Pressure Airflow, CFM	22	44	89	133	178	222	267	311	356
			.001 50	.001 100	.001 200	.001 300	.002 400	.003 500	.005 600	.006 700	.008 800
18 X 18	1 1/4"	Total Pressure			.01	.01	.02	.03	.05	.07	.08
		Throw			2	4	6	6	9	11	13
		Noise Criteria			—	14	20	23	28	33	40
	1"	Total Pressure			.01	.02	.03	.05	.07	.10	.13
		Throw			3	5	8	8	10	14	15
		Noise Criteria			—	14	20	24	29	35	43
	3/4"	Total Pressure	.01	.01	.01	.03	.05	.07	.12	.15	.20
		Throw	2	3	5	7	9	10	14	16	18
		Noise Criteria	—	—	—	15	21	25	31	37	46
	1/2"	Total Pressure	.01	.01	.02	.05	.10	.14	.22	.29	.38
		Throw	2	4	6	9	12	14	17	19	21
		Noise Criteria	—	—	10	16	22	27	33	40	50

Performance Notes:

- All pressures are in inches w.g..
- Throw values are given for a terminal velocity of 50 fpm under isothermal conditions.
- The addition of direction blow blank-offs reduces the effective area and for a given air volume, increases the discharge velocity with a resultant increase in throw, pressure drop and sound level. To determine throw, select the diffuser as if it were supplying a larger volume of air. The table shows the percentage increase required to determine diffuser airflow selection to determine throw.
- Noise Criteria (NC) values are based upon 10dB room absorption, re 10⁻¹² watts. Dash (—) in space indicates an Noise Criteria of less than 10.
- Data derived from tests conducted in accordance with ANSI/ASHRAE Standard 70 – 2006.

Corrections to pressure drop and Noise Criteria level may be approximated by using correction factors as shown and applying them to the 4-way blow value listed in the performance tables.

Blow Pattern	% Increase in Air Volume for Throw Determination	TP Increase Correction Factor	NC Sound Level Add
3-way	35	x 1.5	+ 10
2-way	100	x 4.0	+ 15
1-way	400	x 8.0	+30