

PERFORMANCE DATA:

MODEL 49-280 • 1/2" (13) SPACING • 1/8" (3) BARS • 0° DEFLECTION

Free Area Square Feet per Lineal Foot	Nominal Duct Width	Total Pressure	.009	.020	.035	.056	.078	.107	.140	.178	.220
.035	1 1/2"	Airflow, CFM/FT.	14	21	28	35	42	49	56	63	70
		Noise Criteria	–	–	16	22	28	32	36	39	42
		Throw	Sill or Floor	1-1-1	2-2-2	4-4-4	7-7-7	8-9-10	10-11-12	11-12-14	12-14-17
		Side Wall	2-4-6	4-7-10	6-7-13	7-12-17	8-13-19	10-16-22	11-17-24	12-19-26	13-21-29
.055	2"	Airflow, CFM/FT.	22	33	44	55	66	77	88	99	110
		Noise Criteria	–	–	–	18	23	28	32	35	38
		Throw	Sill or Floor	1-1-1	4-4-4	7-7-7	9-9-10	11-11-12	13-14-16	14-16-18	15-17-20
		Side Wall	3-5-7	5-8-12	7-11-16	9-14-20	11-17-23	13-19-26	14-21-28	15-22-30	17-25-33
.074	2 1/2"	Airflow, CFM/FT.	30	44	59	74	89	104	118	133	148
		Noise Criteria	–	–	–	17	22	27	31	34	37
		Throw	Sill or Floor	1-1-1	5-5-5	9-9-9	11-11-12	13-14-15	15-16-17	18-19-20	20-21-23
		Side Wall	4-6-8	6-9-13	9-13-17	11-16-21	13-18-24	15-21-28	17-24-31	20-27-35	23-31-39
.096	3"	Airflow, CFM/FT.	38	58	77	96	115	134	154	173	192
		Noise Criteria	–	–	–	17	22	27	31	34	37
		Throw	Sill or Floor	2-2-2	7-7-7	10-10-11	12-13-14	15-16-17	18-19-20	20-21-23	23-24-25
		Side Wall	5-7-10	7-10-14	10-14-19	12-17-23	15-20-26	18-24-30	20-27-34	23-30-38	25-33-41
.116	3 1/2"	Airflow, CFM/FT.	46	69	93	116	139	162	186	209	232
		Noise Criteria	–	–	–	17	22	27	31	34	37
		Throw	Sill or Floor	3-3-3	8-8-8	12-12-12	15-15-16	18-19-20	20-21-23	23-24-25	25-26-27
		Side Wall	5-7-10	9-12-16	12-16-20	15-20-25	18-23-28	20-26-32	23-29-36	25-32-39	29-36-43
.139	4"	Airflow, CFM/FT.	56	83	111	139	167	195	222	250	278
		Noise Criteria	–	–	–	18	23	28	32	35	38
		Throw	Sill or Floor	3-3-3	9-9-9	13-13-13	16-16-17	20-20-21	23-23-24	24-25-26	27-27-27
		Side Wall	6-8-11	10-13-17	13-17-21	16-20-25	20-25-30	22-28-34	24-30-37	28-35-41	31-38-44
.179	5"	Airflow, CFM/FT.	72	107	143	179	215	250	286	322	358
		Noise Criteria	–	–	–	18	23	28	32	35	38
		Throw	Sill or Floor	4-4-4	10-10-10	14-14-14	18-18-18	22-22-23	24-24-24	27-27-28	30-30-31
		Side Wall	8-10-13	11-14-18	15-19-23	18-22-27	22-27-32	24-30-36	27-33-39	30-37-43	34-41-47
.221	6"	Airflow, CFM/FT.	88	133	177	221	265	310	354	398	442
		Noise Criteria	–	–	–	20	24	29	33	36	39
		Throw	Sill or Floor	5-5-5	10-10-10	15-15-15	18-18-18	23-23-23	25-25-25	28-28-28	31-31-31
		Side Wall	9-12-15	13-16-20	16-20-24	20-24-29	24-29-34	28-33-39	30-35-40	34-40-45	38-44-49

Performance Notes:

1. Throws are given at 150, 100 and 50 fpm terminal velocities.

2. Throw values are based on a 4 foot section with a cooling ΔT of 20°F (11°C).

For other lengths, use the correction factor table shown.

3. Total Pressure is in inches w.g..

4. Noise Criteria [NC] values are based on a 10 foot active section. For other lengths, use the correction factor table shown.

5. Return Air Applications:

Noise Criteria value is increased by + 4.

Negative Static Pressure = 0.8 x Total Pressure.

6. Dash (–) in space indicates an Noise Criteria level of less than 15.

7. Data derived from tests conducted in accordance with ANSI/ASHRAE Standard 70–2006.

Noise Criteria Correction for Length

Active Length, ft.	1	2	4	8	10	15	20
Correction Factor	-10	-7	-4	-1	0	+2	+3

Throw Correction for Length

Active Length	Terminal Velocity		
	150 fpm	100 fpm	50 fpm
1 ft.	0.5	0.6	0.7
10 ft. +	1.6	1.4	1.2

Nominal Width	Ak Factor per foot	
	Supply	Return
1 1/2"	.047	.040
2"	.066	.055
2 1/2"	.084	.073
3"	.107	.089
3 1/2"	.127	.113
4"	.150	.127
5"	.190	.163
6"	.232	.197