

PERFORMANCE DATA:

MODEL 49-240 • 1/2" (13) SPACING • 1/4" (6) BARS • 0° DEFLECTION

B LINEAR DIFFUSERS AND BAR GRILLES

Free Area Square Feet per Lineal Foot	Nominal Duct Width	Total Pressure	.010	.022	.039	.062	.087	.119	.156	.198	.245	
.026	1 1/2"	Airflow, CFM/FT.	10	16	21	26	31	36	42	47	52	
		Noise Criteria	–	–	–	19	24	30	34	37	40	
		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	12-14-16	14-16-18
			Side Wall	2-4-6	4-7-10	5-9-13	7-12-17	8-13-19	10-16-22	11-17-24	12-19-26	14-21-29
.045	2"	Airflow, CFM/FT.	18	27	36	45	54	63	72	81	90	
		Noise Criteria	–	–	–	18	23	29	33	36	39	
		Throw	Sill or Floor	1-1-1	4-4-4	7-7-7	9-9-10	10-11-13	13-14-16	14-16-18	15-17-20	17-19-21
			Side Wall	3-5-7	5-9-12	7-11-16	9-14-20	11-17-23	13-19-26	14-21-28	15-22-30	17-25-33
.066	2 1/2"	Airflow, CFM/FT.	26	40	53	66	79	92	106	119	132	
		Noise Criteria	–	–	–	20	26	31	35	38	41	
		Throw	Sill or Floor	2-2-2	6-6-6	8-8-9	11-12-13	13-14-16	15-17-19	18-20-22	21-22-23	22-23-24
			Side Wall	4-6-9	6-9-12	8-12-17	11-16-22	13-19-25	15-21-28	18-25-32	21-28-36	22-30-39
.088	3"	Airflow, CFM/FT.	35	53	70	88	106	123	141	158	176	
		Noise Criteria	–	–	15	21	27	32	36	39	42	
		Throw	Sill or Floor	2-2-2	7-7-7	10-10-11	12-13-15	15-16-18	18-19-21	20-22-24	24-24-25	26-26-27
			Side Wall	5-7-10	7-11-15	10-14-19	12-17-23	15-21-27	18-24-31	20-27-34	24-31-39	26-34-41
.110	3 1/2"	Airflow, CFM/FT.	44	66	88	110	132	154	176	198	220	
		Noise Criteria	–	–	16	22	28	33	37	40	43	
		Throw	Sill or Floor	3-3-3	8-8-8	12-12-12	15-15-16	18-19-20	20-21-22	23-24-25	25-26-27	29-29-29
			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
.133	4"	Airflow, CFM/FT.	53	80	106	133	160	186	213	239	266	
		Noise Criteria	–	–	17	23	29	34	38	41	44	
		Throw	Sill or Floor	3-3-3	9-9-9	13-13-13	16-16-17	20-20-21	22-23-24	24-25-26	28-28-28	31-31-31
			Side Wall	6-8-11	10-13-17	13-17-21	16-21-26	20-25-30	22-28-34	24-30-37	28-35-41	31-38-45
.177	5"	Airflow, CFM/FT.	71	106	142	177	212	248	283	318	354	
		Noise Criteria	–	–	18	24	30	35	39	42	45	
		Throw	Sill or Floor	4-4-4	10-10-10	15-15-15	18-18-18	22-22-23	25-25-25	27-27-28	30-30-30	34-34-34
			Side Wall	8-10-13	11-14-18	15-19-23	18-22-27	22-27-32	25-31-37	27-33-39	30-37-43	34-41-47
.222	6"	Airflow, CFM/FT.	89	133	178	222	266	310	355	400	444	
		Noise Criteria	–	–	20	25	31	36	40	43	46	
		Throw	Sill or Floor	5-5-5	10-10-10	15-15-15	19-19-19	23-23-23	25-25-25	29-29-29	31-31-31	36-36-36
			Side Wall	9-11-14	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:

- Throws are given at 150, 100 and 50 fpm terminal velocities.
- 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.
- Total Pressure is in inches w.g..
- Noise Criteria [NC] values are based on a 10 foot active section. For other lengths, use the correction factor table shown.
- Return Air Applications:
Noise Criteria value is increased by + 4.
Negative Static Pressure = 0.8 x Total Pressure.
- Dash (–) in space indicates an Noise Criteria level of less than 15.
- 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"	.035	.030
2"	.054	.046
2 1/2"	.075	.064
3"	.098	.083
3 1/2"	.120	.102
4"	.143	.121
5"	.187	.159
6"	.233	.198