

PERFORMANCE DATA

1-Way Deflection

Size	Static Pressure (in. w.g.)	0.010	0.022	0.040	0.063	0.089	0.121	0.159
3 1/2 in.	Flow Rate (cfm/ft)	21	32	42	53	64	74	85
	Sound (NC)	-	18	26	31	36	40	44
	Throw (ft.)							
	Ceiling	6-10-14	9-14-19	10-16-22	12-18-25	14-21-28	15-22-30	16-24-32
	Sidewall	3-8-13	7-12-17	9-14-19	11-16-21	13-18-23	14-19-24	16-20-25
4 1/4 in.	Flow Rate (cfm/ft)	30	46	61	76	91	106	122
	Sound (NC)	-	20	28	33	38	42	46
	Throw (ft.)							
	Ceiling	6-10-15	9-15-21	11-18-25	13-20-27	15-22-30	17-25-33	18-27-36
	Sidewall	3-8-13	7-12-17	9-14-19	11-16-21	13-18-23	14-19-24	16-20-25
5 in.	Flow Rate (cfm/ft)	40	61	81	101	121	142	162
	Sound (NC)	-	21	29	34	39	43	47
	Throw (ft.)							
	Ceiling	6-12-18	10-16-23	12-19-27	15-23-31	17-25-34	18-27-37	20-29-39
	Sidewall	3-8-13	7-12-17	9-14-19	11-16-21	13-18-23	15-20-25	16-21-26
5 3/4 in.	Flow Rate (cfm/ft)	52	79	105	131	157	183	210
	Sound (NC)	-	22	30	35	40	44	48
	Throw (ft.)							
	Ceiling	8-14-20	12-19-26	15-23-31	17-26-35	19-28-38	20-30-40	22-32-43
	Sidewall	4-9-14	8-13-18	11-16-21	13-18-23	15-20-25	16-21-26	17-22-28
6 1/2 in.	Flow Rate (cfm/ft)	67	100	133	167	200	234	267
	Sound (NC)	-	23	31	36	41	45	49
	Throw (ft.)							
	Ceiling	9-16-23	13-21-29	16-25-34	18-28-38	20-30-40	22-33-44	24-35-46
	Sidewall	5-10-16	9-14-20	13-17-22	15-20-25	16-21-26	17-22-28	18-23-29
8 in.	Flow Rate (cfm/ft)	90	135	180	225	265	315	355
	Sound (NC)	-	24	32	37	42	46	50
	Throw (ft.)							
	Ceiling	12-18-25	16-24-32	20-29-38	21-31-42	23-34-47	27-39-52	27-39-54
	Sidewall	6-11-19	10-15-23	14-18-25	17-21-28	17-22-29	18-23-31	19-24-32
9 1/2 in.	Flow Rate (cfm/ft)	115	170	230	290	350	410	460
	Sound (NC)	-	25	33	38	43	47	51
	Throw (ft.)							
	Ceiling	16-21-29	16-25-34	21-30-40	22-33-44	25-36-49	27-39-54	28-40-56
	Sidewall	7-12-19	11-16-23	15-19-25	18-22-29	18-23-30	19-24-32	20-25-33
11 3/4 in.	Flow Rate (cfm/ft)	160	235	315	400	470	550	690
	Sound (NC)	16	27	35	40	45	49	53
	Throw (ft.)							
	Ceiling	16-25-31	20-30-36	23-34-41	26-38-45	29-43-50	31-46-54	35-50-56
	Sidewall	8-13-21	12-17-25	16-20-27	19-23-31	19-24-32	20-25-34	21-26-35

Performance Notes

Tested in accordance with ASHRAE Standard 70 – 2023 "Method of Testing for Rating the Performance of Air Outlets and Inlets."

- Pressure
Airflow is in cubic feet per minute [cfm].
- Throw data is given in feet [ft] to terminal velocities of 150 fpm (minimum), 100 fpm (middle), 50 fpm (maximum).
These throw values are based on a 4 ft active section of vane with a cooling temperature differential of 20°F. The multiplier factors listed in the table below are applicable for other lengths.

Throw Correction for Length (Multiply)

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

- Sound
NC, sound pressure levels, are based on a room absorption of 10 dB re 10-12 Watts and a 10 ft active section. The NC correction values for other lengths are listed in the table below.

NC Correction for Length

Active Length, ft	1	2	4	6	8	10	15	20	25	30
Correction	-10	-7	-4	-2	-1	0	+2	+3	+4	+5

- Return Air Applications
When used as a return air intake, the NC value given in the performance table will be increased by 4.
For return air application, the negative static pressure will be 0.8 times the static pressure value as shown in the performance table.
- Blanks "-" indicate an NC level below 15.

PERFORMANCE DATA

Linear Vane Diffuser – 2-Way Deflection

Size	Static Pressure	0.010	0.022	0.040	0.063	0.089	0.121	0.159
6 1/4 in.	Flow Rate (cfm/ft)	41	62	82	103	124	144	165
	Sound (NC)	-	21	29	34	39	43	47
	Throw (ft.) Ceiling	5-9-14	8-13-18	10-15-21	12-18-24	13-20-27	14-21-28	16-23-31
7 3/4 in.	Flow Rate (cfm/ft)	62	94	125	156	187	218	250
	Sound (NC)	-	23	31	36	41	45	49
	Throw (ft.) Ceiling	5-10-16	8-14-21	10-17-25	12-20-28	14-22-31	15-24-34	17-26-36
9 1/4 in.	Flow Rate (cfm/ft)	84	126	168	210	252	294	336
	Sound (NC)	-	24	32	37	42	46	50
	Throw (ft.) Ceiling	6-12-18	9-16-24	12-19-27	15-23-31	17-25-34	18-28-38	19-29-40
10 3/4 in.	Flow Rate (cfm/ft)	107	160	214	267	320	374	427
	Sound (NC)	-	25	33	38	43	47	51
	Throw (ft.) Ceiling	6-13-20	11-18-25	14-22-30	17-25-33	18-27-37	20-30-41	21-32-44
12 1/4 in.	Flow Rate (cfm/ft)	131	197	262	328	394	459	525
	Sound (NC)	-	26	34	39	44	48	52
	Throw (ft.) Ceiling	7-14-22	12-19-27	15-23-32	18-27-36	19-29-40	20-31-43	21-33-46

Performance Notes

Tested in accordance with ASHRAE Standard 70 – 2023 "Method of Testing for Rating the Performance of Air Outlets and Inlets."

1. Pressure

Airflow is in cubic feet per minute [cfm].

2. Throw data is given in feet [ft] to terminal velocities of 150 fpm (minimum), 100 fpm (middle), 50 fpm (maximum).

These throw values are based on a 4 ft active section of vane with a cooling temperature differential of 20°F. The multiplier factors listed in the table below are applicable for other lengths.

Throw Correction for Length (Multiply)

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

3. Sound

NC, sound pressure levels, are based on a room absorption of 10 dB re 10-12 Watts and a 10 ft active section. The NC correction values for other lengths are listed in the table below.

NC Correction for Length

Active Length, ft	1	2	4	6	8	10	15	20	25	30
Correction	-10	-7	-4	-2	-1	0	+2	+3	+4	+5

4. Return Air Applications

When used as a return air intake, the NC value given in the performance table will be increased by 4.

For return air application, the negative static pressure will be 0.8 times the static pressure value as shown in the performance table.

5. Blanks "-" indicate an NC level below 15.