

# CVD

## CURVED VANE DIFFUSER



# CVD

## Curved Vane Diffuser

---

The Curved Vane Diffuser (CVD) is available in multiple core styles and features individually adjustable curved vanes that are accessible from the grille face. The vanes allow for field adjustment of the diffuser to optimize thermal comfort.



*1-way airflow*



*2-way airflow*



*2-way corner airflow*



*3-way airflow*



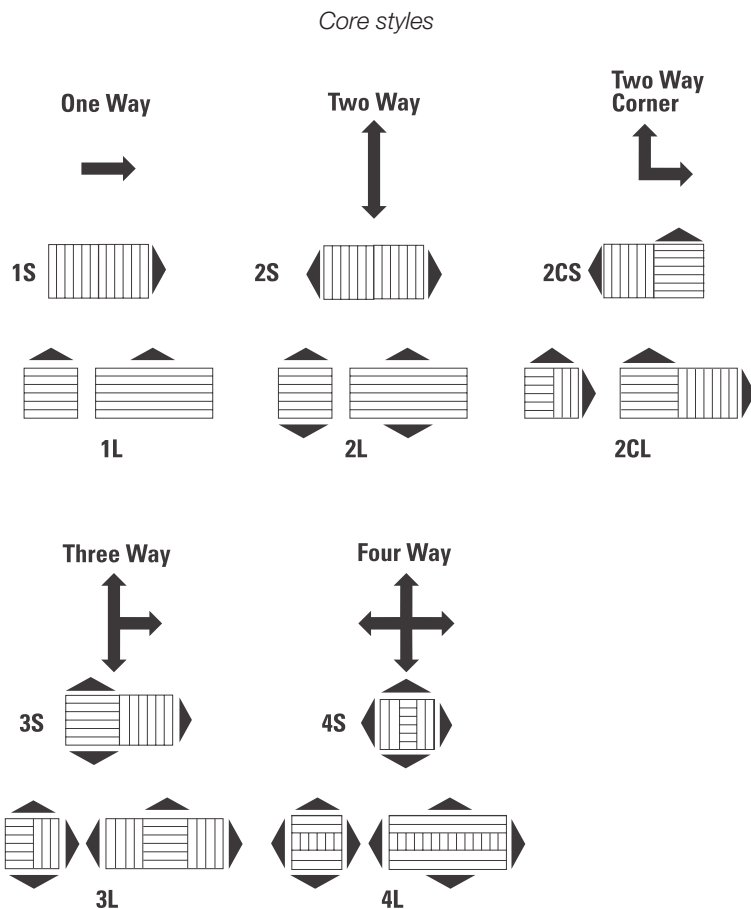
*4-way airflow*

## EASY CEILING INTEGRATION

- + Available in square and rectangular sizes with six mounting style options, this diffuser is easily integrated into ceiling systems.

## VARIETY OF CORE STYLES

- + Available in a wide variety of core styles, the modular design of these diffusers allows for the customization of each unit to accommodate specific airflow pattern requirements.



## TYPICAL APPLICATIONS

Curved vane diffusers can be installed in ceiling or sidewall locations. With multiple core options, material selections, and sizes, the CVD provides a wide range of application versatility.

### CONSTRUCTION

- + Material
  - Extruded Aluminum (CVD)
  - Formed Aluminum (ACVD)
  - Formed Steel (SCVD)
- + Size
  - Minimum: 6 in. x 4 in.
  - Maximum: 24 in. x 24 in.
  - Maximum (extruded aluminum): 36 in. x 36 in.
- + Core Styles
  - 1-way airflow
  - 2-way airflow
  - 2-way corner airflow
  - 3-way airflow
  - 4-way airflow

# PERFORMANCE DATA

Size	Core Velocity (fpm)	100	200	300	400	500	600	700	800	900	1000	
	Velocity Pressure (in. w.g.)	.001	.002	.006	.010	.016	.022	.031	.040	.051	.062	
	Total Pressure (in. w.g.)	.003	.014	.031	.056	.090	.131	.175	.225	.290	.355	
Ac = .12 ft² 6 x 4	Flow Rate (cfm)	10	25	35	50	60	70	85	95	110	120	
	Sound (NC)	-	-	-	-	20	24	28	32	35	38	
	Throw (ft.)	4 Way	-	-	-	5-7-11	5-8-13	7-10-16	8-12-19	9-13-21	10-15-24	11-16-26
		3 Way	-	-	-	5-7-12	6-9-14	7-11-17	8-12-20	10-14-23	10-16-25	12-18-28
		2 Way	-	-	-	5-8-13	7-10-16	8-12-19	9-14-22	10-16-25	12-18-28	13-19-31
1 Way		-	-	-	7-10-16	8-12-19	10-14-23	11-17-27	12-19-30	14-21-34	15-23-37	
Ac = .16 ft² 8 x 4	Flow Rate (cfm)	15	30	50	65	80	95	110	130	145	160	
	Sound (NC)	-	-	-	15	21	26	30	33	36	39	
	Throw (ft.)	4 Way	-	-	4-6-9	5-7-12	6-9-14	7-11-17	8-12-20	9-14-22	10-16-25	12-18-28
		3 Way	-	-	4-6-10	5-8-13	6-9-15	8-12-19	9-14-22	10-15-24	11-17-27	12-19-30
		2 Way	-	-	5-7-11	6-9-14	7-11-17	9-13-21	10-15-24	11-17-27	12-19-30	14-21-33
1 Way		-	-	5-8-13	7-11-17	9-13-21	10-16-25	12-18-29	13-20-32	15-22-36	17-25-40	
Ac = .20 ft² 10 x 4 6 x 6	Flow Rate (cfm)	20	40	60	80	100	120	140	160	180	200	
	Sound (NC)	-	-	-	16	22	27	31	34	37	40	
	Throw (ft.)	4 Way	-	-	4-5-9	5-8-13	6-9-15	8-11-18	9-13-21	10-15-24	11-17-27	12-18-29
		3 Way	-	-	4-6-10	6-9-14	7-10-16	8-12-20	10-14-23	11-16-26	12-18-29	13-20-32
		2 Way	-	-	5-7-11	6-9-15	8-11-18	9-14-22	10-16-25	12-18-29	13-20-32	15-22-35
1 Way		-	-	6-9-14	8-11-18	9-14-22	11-16-26	12-19-30	14-21-34	16-24-38	18-26-42	
Ac = .26 ft² 12 x 4 8 x 6	Flow Rate (cfm)	25	50	80	105	130	155	180	210	235	260	
	Sound (NC)	-	-	-	17	23	28	32	35	38	41	
	Throw (ft.)	4 Way	-	3-4-7	4-6-10	6-9-14	7-10-16	8-12-20	10-14-23	11-16-26	12-18-29	13-20-32
		3 Way	-	3-4-7	5-7-11	6-9-15	8-11-18	9-13-21	10-15-24	11-17-27	13-19-31	14-21-34
		2 Way	-	3-5-8	5-7-12	7-10-16	8-12-20	10-15-24	11-17-27	13-19-31	14-21-34	16-24-38
1 Way		-	4-6-10	6-9-15	8-12-19	10-15-24	12-18-28	13-20-32	15-23-37	17-26-41	19-28-45	
Ac = .30 ft² 14 x 4	Flow Rate (cfm)	30	60	90	120	150	180	210	240	270	300	
	Sound (NC)	-	-	-	18	23	28	32	36	39	42	
	Throw (ft.)	4 Way	-	3-4-7	4-6-10	6-9-14	7-11-17	9-13-21	10-15-24	11-17-27	12-19-30	14-21-33
		3 Way	-	3-5-8	5-7-11	6-9-15	8-12-19	9-14-22	10-16-25	12-18-29	13-20-32	15-22-35
		2 Way	-	3-5-8	5-8-13	7-11-17	9-13-21	10-15-24	12-18-28	13-20-32	16-24-38	18-26-42
1 Way		-	4-6-10	6-9-15	8-12-20	10-16-25	12-18-29	14-21-34	16-24-38	18-27-43	20-29-47	
Ac = .35 ft² 16 x 4 10 x 6 8 x 8	Flow Rate (cfm)	35	70	105	140	175	210	245	280	315	350	
	Sound (NC)	-	-	11	18	24	29	33	37	39	42	
	Throw (ft.)	4 Way	-	3-4-7	5-7-11	6-9-15	8-11-18	9-13-21	10-16-25	12-18-28	13-19-31	14-21-34
		3 Way	-	3-5-8	5-7-12	6-9-15	8-12-19	10-14-23	11-16-26	14-19-30	14-21-33	15-23-37
		2 Way	-	4-6-9	5-8-13	7-11-17	9-13-21	10-16-25	12-18-29	14-21-33	15-23-37	17-26-41
1 Way		-	4-6-10	7-10-16	9-13-21	10-16-25	12-19-30	15-22-35	17-25-40	18-27-44	20-31-49	
Ac = .40 ft² 18 x 4 12 x 6	Flow Rate (cfm)	40	80	120	160	200	240	280	320	360	400	
	Sound (NC)	-	-	12	19	25	30	34	37	40	43	
	Throw (ft.)	4 Way	-	3-5-8	5-7-11	6-9-15	8-12-19	9-14-22	11-16-26	12-18-29	13-20-32	15-22-35
		3 Way	-	3-5-8	5-7-12	7-10-16	8-12-20	10-15-24	11-17-27	13-19-31	15-22-35	16-24-38
		2 Way	-	4-6-9	6-9-14	8-11-18	9-14-22	11-16-26	12-19-30	14-21-34	16-24-38	18-26-42
1 Way		-	5-7-11	7-10-16	9-14-22	10-16-26	13-19-31	15-22-36	17-26-41	19-29-46	21-32-51	
Ac = .45 ft² 20 x 4 14 x 6 10 x 8	Flow Rate (cfm)	45	90	135	180	225	270	315	360	405	450	
	Sound (NC)	-	-	-	19	26	30	34	38	41	44	
	Throw (ft.)	4 Way	-	3-5-8	5-7-12	6-9-15	8-12-19	10-14-23	11-16-26	12-19-30	14-21-33	15-23-37
		3 Way	-	3-5-8	5-8-13	7-11-17	9-13-21	10-15-24	12-18-28	13-20-32	15-22-36	16-24-39
		2 Way	-	4-6-9	6-9-14	8-12-19	10-14-23	11-17-27	13-19-31	15-22-35	16-24-39	18-27-44
1 Way		-	5-7-11	7-11-17	9-14-22	11-17-27	13-20-32	15-23-37	18-26-42	20-29-47	22-33-53	
Ac = .55 ft² 4 x 4 16 x 6 12 x 8	Flow Rate (cfm)	55	110	165	220	275	330	385	440	495	550	
	Sound (NC)	-	-	-	20	26	31	35	39	41	44	
	Throw (ft.)	4 Way	2-3-4	3-5-8	5-7-12	7-10-16	8-12-20	10-15-24	12-18-28	13-19-31	15-22-35	16-24-39
		3 Way	2-3-5	4-6-9	5-8-13	8-11-18	9-14-22	11-16-26	12-19-30	14-21-33	16-24-38	17-26-41
		2 Way	2-3-5	4-6-10	6-9-15	8-12-20	10-15-24	12-18-29	14-21-33	15-23-37	17-26-41	19-29-46
1 Way		2-4-6	5-7-12	8-11-18	10-14-23	12-18-29	14-21-34	16-24-39	18-27-44	21-31-50	23-35-56	

**Performance Notes:**

1. Tested in accordance with ASHRAE Standard 70 – 2006 Method of Testing for Rating the Performance of Air Outlets and Inlets.
2. Air flow is in cfm.
3. All pressures are in in. w.g.
4. Throw values are measured in feet for terminal velocities of 150 fpm (minimum), 100 fpm (middle) and 50 fpm (maximum), with a cooling temperature differential of 20 °F. The throw values may be increased or decreased 20% by changing the vane settings.
5. NC values are based on a room absorption of 10 dB re 10<sup>-12</sup> watts and one diffuser.
6. Blanks "-" indicate an NC level below 15.
7. This data is based on an opening of about 1/8 in. between the frame and the first vane, with progressively wider spacing between vanes away from the frame. The setting will cause the air to be discharged parallel to the face of the diffuser (horizontal discharge if installed in ceiling).
8. If the vanes are adjusted to the full open position, the listed NC values will be reduced by 7 and the total pressure will be 0.30 times that shown in the tables.
9. Models SCVD / ACVD 4 in. rectangular units are available in 1 and 2 way patterns only.
10. Does not include effects of ceiling radiation damper (SCVD-FR)

# PERFORMANCE DATA

Size	Core Velocity (fpm)	100	200	300	400	500	600	700	800	900	1000	
	Velocity Pressure (in. w.g.)	.001	.002	.006	.010	.016	.022	.031	.040	.051	.062	
	Total Pressure (in. w.g.)	.003	.014	.031	.056	.090	.131	.175	.225	.290	.355	
Ac = .62 ft <sup>2</sup> 18 x 6 10 x 10	Flow Rate (cfm)	60	125	185	250	310	370	435	495	560	620	
	Sound (NC)	-	-	-	21	27	32	36	39	42	45	
	Throw (ft.)	4 Way	2-3-4	4-6-9	5-8-13	7-11-17	9-13-21	10-16-25	12-18-28	13-20-32	15-22-36	17-25-40
		3 Way	2-3-5	4-6-9	6-9-14	8-11-18	9-14-22	11-17-27	13-19-31	14-21-34	16-24-39	18-27-43
		2 Way	2-3-5	4-6-10	6-9-15	8-12-20	10-16-25	12-18-29	14-21-34	16-24-38	18-27-43	20-29-47
1 Way		2-4-6	5-7-12	8-11-18	10-15-24	12-19-30	15-22-35	17-26-41	19-29-46	21-32-51	24-36-57	
Ac = .70 ft <sup>2</sup> 30 x 4 20 x 6 14 x 8 12 x 10	Flow Rate (cfm)	70	140	210	280	350	420	490	560	630	700	
	Sound (NC)	-	-	14	21	27	32	36	40	42	45	
	Throw (ft.)	4 Way	2-3-5	4-6-9	5-8-13	7-11-17	9-13-21	10-16-25	12-18-29	14-21-33	15-23-37	17-26-41
		3 Way	2-3-5	4-6-9	6-9-14	8-12-19	10-14-23	11-17-27	13-20-32	15-22-36	17-25-40	18-27-44
		2 Way	2-3-6	5-7-11	7-10-16	9-13-21	10-16-25	12-19-30	15-22-35	17-25-40	18-27-44	20-31-49
1 Way		3-4-7	5-8-13	8-12-19	10-16-25	12-19-30	15-22-36	18-26-42	20-29-47	22-33-53	25-37-59	
Ac = .81 ft <sup>2</sup> 36 x 4 24 x 6 16 x 8 14 x 10	Flow Rate (cfm)	80	160	245	375	405	485	565	650	730	810	
	Sound (NC)	-	-	15	22	28	33	37	40	43	46	
	Throw (ft.)	4 Way	2-3-5	4-6-9	6-9-14	8-11-18	9-14-22	11-16-26	12-19-30	14-21-34	16-24-38	18-27-43
		3 Way	2-3-5	4-6-10	6-9-15	8-12-20	11-16-26	12-18-28	14-21-33	15-23-37	17-26-41	19-29-46
		2 Way	2-4-6	5-7-11	7-10-16	9-14-22	11-16-26	13-19-31	15-22-36	17-26-41	19-26-46	21-32-51
1 Way		3-4-7	5-8-13	8-12-20	11-16-26	13-20-32	16-24-38	18-27-44	20-31-49	23-34-55	26-39-62	
Ac = .87 ft <sup>2</sup> 18 x 8 12 x 12	Flow Rate (cfm)	85	175	260	350	435	520	610	695	785	870	
	Sound (NC)	-	-	15	22	28	33	37	40	43	46	
	Throw (ft.)	4 Way	2-3-5	4-6-9	6-9-14	8-12-19	10-14-23	11-17-27	13-19-31	15-22-35	16-24-39	18-27-43
		3 Way	2-3-5	4-6-10	6-9-15	8-12-20	10-16-25	12-18-29	14-21-33	16-24-38	18-26-42	20-29-47
		2 Way	2-4-6	5-7-11	7-11-17	9-14-22	11-17-27	13-20-32	15-23-37	18-26-42	20-29-47	22-32-52
1 Way		3-4-7	6-9-14	8-12-20	11-16-26	13-20-32	16-24-39	19-29-45	21-31-50	25-35-56	26-39-63	
Ac = 1.02 ft <sup>2</sup> 30 x 6 20 x 8 16 x 10 14 x 12	Flow Rate (cfm)	100	205	305	410	510	610	715	815	920	1020	
	Sound (NC)	-	-	16	23	29	34	38	41	44	47	
	Throw (ft.)	4 Way	2-3-5	4-6-10	6-9-15	8-12-19	10-15-24	12-18-28	13-20-32	15-22-36	17-26-41	19-28-45
		3 Way	2-4-6	4-6-10	7-10-16	9-13-21	10-16-25	12-19-30	15-22-35	16-24-39	18-27-44	20-30-48
		2 Way	2-4-6	5-7-12	7-11-17	10-14-23	12-18-28	14-21-33	16-24-39	18-27-43	20-31-49	23-34-55
1 Way		3-4-7	6-9-14	8-12-20	11-16-26	13-20-32	16-24-39	19-28-45	21-31-50	25-35-56	26-39-63	
Ac = 1.15 ft <sup>2</sup> 24 x 8 18 x 10 16 x 12	Flow Rate (cfm)	115	230	345	460	575	690	805	920	1040	1150	
	Sound (NC)	-	-	16	24	30	34	38	42	45	48	
	Throw (ft.)	4 Way	2-3-5	4-6-10	6-9-15	8-12-20	10-16-25	12-18-29	14-21-33	16-24-38	18-26-42	19-29-46
		3 Way	2-4-6	5-7-11	7-10-16	9-13-21	11-16-26	13-19-31	15-22-36	17-26-41	19-28-45	21-31-50
		2 Way	2-4-6	5-7-12	8-11-18	10-14-23	12-18-29	14-21-34	17-25-40	19-28-45	21-31-50	23-35-56
1 Way		3-5-8	6-9-15	9-14-22	12-18-28	15-22-35	17-26-41	20-29-47	22-34-54	25-37-60	28-42-68	
Ac = 1.25 ft <sup>2</sup> 36 x 6 20 x 10 14 x 14	Flow Rate (cfm)	125	250	375	500	625	750	875	1000	1120	1250	
	Sound (NC)	-	-	16	24	30	34	38	42	45	48	
	Throw (ft.)	4 Way	2-3-5	4-6-10	6-9-15	8-12-20	10-16-25	12-18-29	14-21-34	16-24-38	18-27-43	20-29-47
		3 Way	2-4-6	5-7-11	7-10-16	9-14-22	11-17-27	13-20-32	15-23-37	17-26-41	19-29-46	21-32-51
		2 Way	2-4-6	5-7-12	8-11-18	10-15-24	12-19-30	15-22-35	17-26-41	19-29-46	21-32-51	24-36-57
1 Way		3-5-8	6-9-15	9-14-22	12-18-29	15-22-35	18-26-42	20-30-48	23-34-55	26-39-62	29-43-69	
Ac = 1.35 ft <sup>2</sup> 16 x 4 18 x 12	Flow Rate (cfm)	135	270	405	540	675	810	945	1080	1220	1350	
	Sound (NC)	-	-	17	24	30	35	39	42	45	48	
	Throw (ft.)	4 Way	2-4-6	4-6-10	7-10-16	9-13-21	10-16-25	12-19-30	15-22-35	16-24-39	18-27-44	20-30-48
		3 Way	2-4-6	5-7-11	7-11-17	9-14-22	11-17-27	13-20-32	15-23-37	18-26-42	20-29-47	22-32-52
		2 Way	3-4-7	5-8-13	8-12-19	10-16-25	12-19-30	15-22-36	18-26-42	20-29-47	22-33-53	25-37-59
1 Way		3-5-8	6-9-15	10-14-23	12-18-29	15-22-36	18-27-43	21-31-50	23-35-56	26-39-63	29-44-70	
Ac = 1.53 ft <sup>2</sup> 30 x 8 24 x 10 20 x 12 18 x 14 16 x 16	Flow Rate (cfm)	155	305	460	610	765	920	1070	1220	1380	1530	
	Sound (NC)	-	-	17	25	31	36	40	43	46	49	
	Throw (ft.)	4 Way	2-4-6	5-7-11	7-10-16	9-13-21	11-16-26	13-19-31	15-22-36	17-25-40	19-28-45	21-31-50
		3 Way	2-4-6	5-7-12	7-11-17	10-14-23	12-18-28	14-21-33	16-24-39	18-27-44	20-31-49	22-34-54
		2 Way	3-4-7	5-8-13	8-12-19	10-16-25	13-20-32	15-23-37	18-27-43	20-30-48	23-34-55	25-37-60
1 Way		3-5-8	7-10-16	10-14-23	12-19-30	15-23-37	18-27-44	21-32-51	24-36-58	27-41-65	30-46-73	

**Performance Notes:**

1. Tested in accordance with ASHRAE Standard 70 – 2006 Method of Testing for Rating the Performance of Air Outlets and Inlets.
2. Air flow is in cfm.
3. All pressures are in in. w.g.
4. Throw values are measured in feet for terminal velocities of 150 fpm (minimum), 100 fpm (middle) and 50 fpm (maximum), with a cooling temperature differential of 20 °F. The throw values may be increased or decreased 20% by changing the vane settings.
5. NC values are based on a room absorption of 10 dB re 10<sup>-12</sup> watts and one diffuser.
6. Blanks "-" indicate an NC level below 15.
7. This data is based on an opening of about 1/8 in. between the frame and the first vane, with progressively wider spacing between vanes away from the frame. The setting will cause the air to be discharged parallel to the face of the diffuser (horizontal discharge if installed in ceiling).
8. If the vanes are adjusted to the full open position, the listed NC values will be reduced by 7 and the total pressure will be 0.30 times that shown in the tables.
9. Models SCVD / ACVD 4 in. rectangular units are available in 1 and 2 way patterns only.
10. Does not include effects of ceiling radiation damper (SCVD-FR)

# PERFORMANCE DATA

Size	Core Velocity (fpm)		100	200	300	400	500	600	700	800	900	1000
	Velocity Pressure (in. w.g.)		.001	.002	.006	.010	.016	.022	.031	.040	.051	.062
	Total Pressure (in. w.g.)		.003	.014	.031	.056	.090	.131	.175	.225	.290	.355
<b>Ac = 1.82 ft<sup>2</sup></b> 36 x 8 30 x 10 24 x 12 20 x 14 18 x 16	Flow Rate (cfm)		182	365	545	730	910	1090	1270	1460	1640	1820
	Sound (NC)		-	-	18	26	32	36	40	44	47	50
	Throw (ft.)	4 Way	2-4-6	5-7-11	7-11-17	9-14-22	11-17-27	13-20-32	15-23-37	18-26-42	20-29-47	22-33-53
		3 Way	2-4-6	5-7-12	8-11-18	10-15-24	12-18-29	15-22-35	17-25-40	19-28-45	21-32-51	24-36-57
		2 Way	3-4-7	6-9-14	8-12-20	11-17-27	14-21-33	16-24-39	19-28-45	21-31-50	24-36-57	26-39-63
1 Way		3-5-8	7-10-16	10-15-24	13-20-32	16-24-39	19-29-46	22-34-54	25-37-60	28-42-68	32-48-76	
<b>Ac = 2.10 ft<sup>2</sup></b> 24 x 14 20 x 16 18 x 18	Flow Rate (cfm)		210	420	630	840	1050	1260	1470	1680	1890	2100
	Sound (NC)		-	-	19	26	32	37	41	44	47	50
	Throw (ft.)	4 Way	2-4-6	5-7-12	8-11-18	10-14-23	12-18-28	14-21-34	16-24-39	18-27-44	20-31-49	23-34-55
		3 Way	3-4-7	5-8-13	8-12-19	10-16-25	12-19-30	15-22-36	18-26-42	20-29-47	22-33-53	25-37-59
		2 Way	3-4-7	6-9-14	9-13-21	12-18-28	14-21-34	17-25-40	19-29-46	22-32-52	25-37-59	28-41-66
1 Way		4-6-9	7-11-17	10-16-25	14-21-33	17-25-40	20-30-48	23-34-55	26-39-62	29-44-70	33-50-80	
<b>Ac = 2.35 ft<sup>2</sup></b> 36 x 10 30 x 12 24 x 16 20 x 18	Flow Rate (cfm)		235	470	705	940	1180	1410	1640	1880	2120	2350
	Sound (NC)		-	-	19	27	33	37	41	45	48	51
	Throw (ft.)	4 Way	2-4-6	5-7-12	8-11-18	10-15-24	12-18-29	15-22-35	17-25-40	19-28-45	21-31-50	24-36-57
		3 Way	3-4-7	5-8-13	8-12-20	10-16-25	13-19-31	15-23-37	18-27-43	20-31-49	23-34-55	25-37-60
		2 Way	3-5-8	6-9-15	9-14-22	12-18-28	15-22-35	18-26-42	20-30-48	22-34-54	25-38-61	28-42-68
1 Way		4-6-9	7-11-17	11-16-26	14-21-34	18-26-42	20-31-49	24-36-57	27-40-64	30-45-72	34-51-82	
<b>Ac = 2.68 ft<sup>2</sup></b> 36 x 12 30 x 14 24 x 18 20 x 20	Flow Rate (cfm)		270	535	805	1070	1340	1610	1880	2140	2410	2680
	Sound (NC)		-	-	20	27	33	38	42	45	48	51
	Throw (ft.)	4 Way	3-4-7	5-8-13	8-12-19	10-16-25	12-19-30	15-22-36	18-26-42	20-29-47	22-32-52	25-37-59
		3 Way	3-4-7	6-9-14	8-12-20	11-16-26	14-21-33	16-24-39	19-28-45	21-31-50	24-36-57	26-39-63
		2 Way	3-5-8	6-9-15	9-14-22	12-18-29	15-22-36	20-30-48	20-31-49	23-35-56	26-39-62	29-44-70
1 Way		4-6-9	8-11-18	11-17-27	15-22-35	18-27-43	21-32-51	25-37-59	28-41-66	31-47-75	35-53-85	
<b>Ac = 3.15 ft<sup>2</sup></b> 36 x 14 30 x 16 24 x 20	Flow Rate (cfm)		315	630	945	1260	1580	1890	2200	2520	2840	3150
	Sound (NC)		-	-	20	28	34	39	43	46	49	52
	Throw (ft.)	4 Way	3-4-7	5-8-13	8-12-19	11-16-26	13-19-31	15-23-37	18-27-43	20-31-49	23-34-55	26-39-62
		3 Way	3-4-7	6-9-14	9-13-21	11-17-27	14-21-34	17-25-40	19-29-46	22-32-52	25-37-59	28-41-66
		2 Way	3-5-8	7-10-16	10-15-24	12-19-30	16-24-38	19-28-45	21-32-51	24-36-58	27-41-65	30-46-73
1 Way		4-6-10	8-12-19	12-18-28	15-22-36	19-28-45	22-33-53	26-39-62	29-43-69	33-49-47	37-56-89	
<b>Ac = 3.65 ft<sup>2</sup></b> 36 x 16 30 x 18 24 x 24	Flow Rate (cfm)		365	730	1100	1460	1820	2190	2560	2920	3280	3650
	Sound (NC)		-	-	21	29	35	39	43	47	50	53
	Throw (ft.)	4 Way	3-4-7	6-9-14	8-12-20	11-17-27	14-21-33	16-24-39	19-28-45	21-31-50	24-36-57	27-40-64
		3 Way	3-5-8	6-9-15	9-14-22	12-18-28	15-22-35	18-26-42	20-30-48	23-34-55	25-38-61	28-42-68
		2 Way	3-5-8	7-10-16	10-15-24	13-20-32	16-24-39	19-29-46	22-34-54	25-37-60	28-42-68	32-48-76
1 Way		4-6-10	8-12-20	12-18-29	15-23-37	19-29-46	23-34-55	27-40-64	30-45-72	34-51-82	38-57-92	

**Performance Notes:**

1. Tested in accordance with ASHRAE Standard 70 – 2006 Method of Testing for Rating the Performance of Air Outlets and Inlets.
2. Air flow is in cfm.
3. All pressures are in in. w.g.
4. Throw values are measured in feet for terminal velocities of 150 fpm (minimum), 100 fpm (middle) and 50 fpm (maximum), with a cooling temperature differential of 20 °F. The throw values may be increased or decreased 20% by changing the vane settings.
5. NC values are based on a room absorption of 10 dB re 10<sup>-12</sup> watts and one diffuser.
6. Blanks "-" indicate an NC level below 15.
7. This data is based on an opening of about 1/8 in. between the frame and the first vane, with progressively wider spacing between vanes away from the frame. The setting will cause the air to be discharged parallel to the face of the diffuser (horizontal discharge if installed in ceiling).
8. If the vanes are adjusted to the full open position, the listed NC values will be reduced by 7 and the total pressure will be 0.30 times that shown in the tables.
9. Models SCVD / ACVD 4 in. rectangular units are available in 1 and 2 way patterns only.
10. Does not include effects of ceiling radiation damper (SCVD-FR)

# PERFORMANCE DATA

Size	Core Velocity (fpm)	100	200	300	400	500	600	700	800	900	1000	
	Velocity Pressure (in. w.g.)	.001	.002	.006	.010	.016	.022	.031	.040	.051	.062	
	Total Pressure (in. w.g.)	.003	.014	.031	.056	.090	.131	.175	.225	.290	.355	
Ac = 4.05 ft <sup>2</sup> 36 x 18 30 x 20	Flow Rate (cfm)	405	810	1220	1620	2020	2430	2830	3240	3640	4050	
	Sound (NC)	-	11	22	29	35	40	44	47	50	53	
	Throw (ft.)	4 Way	3-4-7	6-9-14	9-13-21	11-17-27	14-21-34	17-25-40	19-29-46	22-32-52	25-37-59	28-41-66
		3 Way	3-5-8	6-9-15	9-14-22	12-18-29	15-22-36	18-27-43	20-31-49	23-35-56	26-39-63	29-44-70
		2 Way	4-6-9	7-11-17	10-16-25	13-20-32	17-25-40	20-29-47	23-34-55	26-39-62	29-44-70	33-49-79
1 Way	4-6-10	8-12-20	12-19-30	16-24-39	20-29-47	24-36-57	28-41-66	31-46-74	35-52-84	39-59-94		
Ac = 4.72 ft <sup>2</sup> 36 x 20 30 x 24	Flow Rate (cfm)	470	945	1420	1890	2360	2830	3300	3780	4250	4720	
	Sound (NC)	-	12	22	30	36	40	44	48	51	54	
	Throw (ft.)	4 Way	3-5-8	6-9-15	9-14-22	12-18-28	15-22-35	18-26-42	20-30-48	22-34-54	25-38-61	28-42-68
		3 Way	3-5-8	7-10-16	10-14-23	12-19-30	16-24-38	19-28-45	22-32-52	24-36-58	28-41-66	31-46-74
		2 Way	4-6-9	7-11-17	11-16-26	14-21-34	18-26-42	20-31-49	24-36-57	27-40-64	30-46-73	34-51-82
1 Way	5-7-11	9-13-21	13-19-31	17-25-40	20-31-49	25-37-59	28-42-68	32-49-78	37-55-88	41-61-98		
Ac = 5.82 ft <sup>2</sup> 36 x 24 30 x 30	Flow Rate (cfm)	580	1160	1750	2330	2910	3490	4070	4660	5240	5820	
	Sound (NC)	-	13	23	31	37	41	45	49	52	55	
	Throw (ft.)	4 Way	3-5-8	6-9-15	10-14-23	12-19-30	15-23-37	18-27-44	21-32-51	24-36-57	27-40-64	30-45-72
		3 Way	4-6-9	7-10-16	10-16-25	13-20-32	17-25-40	20-29-47	23-34-55	25-38-61	29-44-70	32-49-78
		2 Way	4-6-9	8-11-18	11-17-27	15-22-35	18-27-44	22-32-52	25-37-60	28-42-68	32-48-77	36-54-87
1 Way	5-7-11	9-14-22	13-20-32	18-26-42	22-32-52	26-39-62	30-45-72	34-51-82	39-56-93	44-66-105		
Ac = 7.17 ft <sup>2</sup> 36 x 30	Flow Rate (cfm)	715	1430	2150	2870	3580	4300	5020	5740	6450	7170	
	Sound (NC)	-	14	24	31	37	42	46	50	53	56	
	Throw (ft.)	4 Way	3-5-8	7-10-16	10-15-24	13-20-32	16-24-39	19-29-46	22-34-54	25-37-60	28-42-68	32-48-76
		3 Way	4-6-9	7-11-17	11-16-26	14-21-34	18-26-42	21-31-50	24-36-57	27-41-65	30-46-73	34-51-82
		2 Way	4-6-10	8-12-20	12-18-29	15-23-37	19-29-46	23-34-55	27-40-64	30-45-72	34-51-82	38-57-92
1 Way	5-7-12	10-14-23	14-21-34	18-27-44	23-34-55	28-41-66	32-48-77	36-54-87	41-61-98	46-69-110		
Ac = 8.63 ft <sup>2</sup> 36 x 36	Flow Rate (cfm)	865	1730	2590	3450	4320	5180	6040	6900	7700	8630	
	Sound (NC)	-	14	25	32	38	43	47	51	53	56	
	Throw (ft.)	4 Way	4-6-9	7-11-17	10-16-25	14-21-33	17-26-41	20-31-49	23-35-56	27-40-64	30-44-71	33-50-80
		3 Way	4-6-10	8-11-18	11-17-27	15-22-35	18-27-44	22-32-52	25-37-60	28-42-68	32-48-77	36-54-87
		2 Way	4-6-10	8-12-20	12-19-30	16-24-39	20-30-48	24-36-58	28-42-67	32-48-76	36-54-86	40-60-96
1 Way	5-8-13	10-15-24	15-22-36	19-29-46	24-36-58	29-44-70	33-50-80	38-57-91	43-64-103	48-72-116		

**Performance Notes:**

1. Tested in accordance with ASHRAE Standard 70 – 2006 Method of Testing for Rating the Performance of Air Outlets and Inlets.
2. Air flow is in cfm.
3. All pressures are in in. w.g.
4. Throw values are measured in feet for terminal velocities of 150 fpm (minimum), 100 fpm (middle) and 50 fpm (maximum), with a cooling temperature differential of 20 °F. The throw values may be increased or decreased 20% by changing the vane settings.
5. NC values are based on a room absorption of 10 dB re 10<sup>-12</sup> watts and one diffuser.
6. Blanks "-" indicate an NC level below 15.
7. This data is based on an opening of about 1/8 in. between the frame and the first vane, with progressively wider spacing between vanes away from the frame. The setting will cause the air to be discharged parallel to the face of the diffuser (horizontal discharge if installed in ceiling).
8. If the vanes are adjusted to the full open position, the listed NC values will be reduced by 7 and the total pressure will be 0.30 times that shown in the tables.
9. Models SCVD / ACVD 4 in. rectangular units are available in 1 and 2 way patterns only.
10. Does not include effects of ceiling radiation damper (SCVD-FR)



Product Improvement is a continuing endeavour at Price. Therefore, specifications are subject to change without notice. Consult your Price Sales Representative for current specifications or more detailed information. Not all products may be available in all geographic areas. All goods described in this document are warranted as described in the Limited Warranty shown at [priceindustries.com](http://priceindustries.com). The complete Price product catalog can be viewed online at [priceindustries.com](http://priceindustries.com).