



# ENGINEERING DATA

## AV/AVS

Nominal Duct Size (in. <sup>2</sup> )	Nominal Duct Area (ft. <sup>2</sup> )	Core Area (ft. <sup>2</sup> )	Core Velocity		300	400	500	600	700	800	1000	1200	1400
			Velocity Pressure		0.006	0.010	0.016	0.022	0.031	0.040	0.062	0.090	0.122
			Total Pressure	0°	0.010	0.017	0.027	0.038	0.052	0.068	0.106	0.153	0.208
22.5°	0.011	0.019		0.030	0.043	0.058	0.076	0.118	0.171	0.232			
45°	0.016	0.029		0.045	0.065	0.089	0.116	0.181	0.260	0.354			
6 x 6	0.25	0.19	CFM		57	76	95	114	133	152	190	228	266
			NC		-	-	-	11	15	19	26	31	36
			Throw (ft.)	0°	5-7-14	7-10-16	8-12-18	10-14-20	12-15-21	13-16-23	15-18-25	16-20-28	17-21-30
				22.5°	4-6-11	5-8-12	6-10-14	8-11-15	9-12-16	10-12-18	11-14-20	12-15-22	13-16-23
				45°	2-3-6	3-4-7	4-6-8	4-6-9	5-7-10	6-7-10	7-8-11	7-9-12	8-10-13
8 x 6	0.33	0.26	CFM		78	104	130	156	182	208	260	312	364
			NC		-	-	-	12	16	20	27	33	37
			Throw (ft.)	0°	5-9-16	8-12-19	10-14-21	12-16-23	13-18-25	15-19-27	17-21-30	19-23-32	20-25-35
				22.5°	4-7-13	6-9-15	7-11-16	9-13-18	10-14-19	12-15-21	13-16-23	15-18-25	16-19-27
				45°	2-4-7	3-5-8	4-6-9	5-7-10	6-8-11	7-8-12	8-9-13	8-10-15	9-11-16
10 x 6	0.42	0.34	CFM		102	136	170	204	238	272	340	408	476
			NC		-	-	-	13	18	22	28	34	38
			Throw (ft.)	0°	6-10-19	9-13-21	11-17-24	13-19-26	15-20-28	18-21-30	20-24-34	21-26-37	23-28-40
				22.5°	5-8-14	7-10-17	9-13-19	10-14-20	12-16-22	14-17-23	15-19-26	17-20-29	18-22-31
				45°	3-4-8	4-6-10	5-7-11	6-8-12	7-9-13	8-10-14	9-11-15	10-12-17	10-13-18
12 x 6	0.50	0.41	CFM		123	164	205	246	287	328	410	492	574
			NC		-	-	-	14	18	22	29	34	39
			Throw (ft.)	0°	7-11-20	10-15-24	12-18-26	15-20-29	17-22-31	19-24-33	21-26-37	24-29-41	25-31-44
				22.5°	5-8-16	7-11-18	9-14-20	11-16-22	13-17-24	15-18-26	17-20-29	18-22-32	20-24-34
				45°	3-5-9	4-7-11	5-8-12	7-9-13	8-10-14	9-11-15	10-12-17	11-13-18	11-14-20
14 x 6	0.58	0.48	CFM		144	192	240	288	336	384	480	576	672
			NC		-	-	-	14	19	23	30	35	40
			Throw (ft.)	0°	7-12-22	10-16-25	13-20-28	16-22-31	18-24-34	21-25-36	23-28-40	25-31-44	28-34-48
				22.5°	6-9-17	8-12-20	10-15-22	12-17-24	14-18-26	16-20-28	18-22-31	20-24-34	21-26-37
				45°	3-5-10	5-7-11	6-9-13	7-10-14	8-11-15	9-11-16	10-13-18	11-14-20	12-15-21
16 x 6	0.67	0.56	CFM		171	228	285	342	399	456	570	684	798
			NC		-	-	-	15	20	24	30	36	40
			Throw (ft.)	0°	8-13-24	11-17-28	14-21-31	17-24-34	20-26-37	23-28-39	25-31-44	28-34-48	30-37-52
				22.5°	6-10-19	9-13-22	11-17-24	13-19-26	15-20-28	18-22-30	20-24-34	22-26-37	23-28-40
				45°	4-6-11	5-8-12	6-10-14	8-11-15	9-12-17	10-12-18	11-14-20	12-15-22	13-17-23
18 x 6	0.75	0.63	CFM		189	252	315	378	441	504	630	756	882
			NC		-	-	-	16	20	24	31	36	41
			Throw (ft.)	0°	8-13-25	12-18-29	15-22-33	18-25-36	21-27-39	24-29-41	27-33-46	29-36-51	32-39-55
				22.5°	6-10-20	9-14-23	12-17-25	14-20-28	16-21-30	18-23-32	21-25-36	23-28-39	24-30-42
				45°	4-6-11	5-8-13	7-10-15	8-11-16	9-12-17	11-13-19	12-15-21	13-16-23	14-17-25
20 x 6	0.83	0.70	CFM		216	288	360	432	504	576	720	864	1008
			NC		-	-	11	16	21	25	31	37	41
			Throw (ft.)	0°	9-14-27	13-19-31	16-24-35	19-27-38	22-29-41	25-31-44	28-35-49	31-38-54	34-41-58
				22.5°	7-11-21	10-15-24	12-19-27	15-21-30	17-23-32	20-24-34	22-27-38	24-30-42	26-32-45
				45°	4-6-12	6-9-14	7-11-16	9-12-17	10-13-19	11-14-20	13-16-22	14-17-24	15-19-26
22 x 6	0.92	0.77	CFM		231	308	385	462	539	616	770	924	1078
			NC		-	-	11	16	21	25	32	37	42
			Throw (ft.)	0°	9-15-28	13-20-32	17-25-36	20-28-40	23-30-43	26-32-46	29-36-51	32-40-56	35-43-60
				22.5°	7-12-22	10-15-25	13-19-28	15-22-31	18-23-33	20-25-35	23-28-40	25-31-43	27-33-47
				45°	4-7-13	6-9-15	7-11-16	9-13-18	10-14-19	12-15-21	13-16-23	15-18-25	16-19-27
24 x 6	1.00	0.85	CFM		264	352	440	528	616	704	880	1056	1232
			NC		-	-	11	17	22	26	32	38	42
			Throw (ft.)	0°	10-16-30	14-21-34	18-27-39	21-30-42	25-32-46	28-34-49	31-39-55	34-42-60	37-46-65
				22.5°	8-12-23	11-16-27	14-21-30	16-23-33	19-25-35	22-27-38	24-30-42	27-33-46	29-35-50
				45°	4-7-13	6-10-16	8-12-17	10-13-19	11-15-21	13-16-22	14-17-25	16-19-27	17-21-29

1. Tests conducted in accordance with ANSI/ASHRAE Standard 70-2006 and performance data includes damper.
2. The values 0°, 22.5°, and 45° are horizontal blade deflection angles. For 20°, use the 0° throw value and the 22.5° total pressure value.
3. Units: Core Velocity - Feet Per Minute (FPM); Total Pressure - in. wc.; Throw - ft. at 150, 100, and 50 fpm terminal velocity.
4. NC is based upon 10 dB room absorption (Re: 10<sup>-12</sup> watts) evaluated at 125 through 4000 Hz octave bands at 0° blade deflection. For 22.5° and 45°, increase stated NC level by 1 and 7 respectively. Dash "-" indicates NC value less than 10.
5. For values without a damper, multiply listed throw value by 0.97, multiply total pressure by 0.88, and reduce NC by 4.



# ENGINEERING DATA

## AV/AVS

Nominal Duct Size (in. <sup>2</sup> )	Nominal Duct Area (ft. <sup>2</sup> )	Core Area (ft. <sup>2</sup> )	Core Velocity		300	400	500	600	700	800	1000	1200	1400
			Velocity Pressure		0.006	0.010	0.016	0.022	0.031	0.040	0.062	0.090	0.122
			Total Pressure	0°	0.010	0.017	0.027	0.038	0.052	0.068	0.106	0.153	0.208
				22.5°	0.011	0.019	0.030	0.043	0.058	0.076	0.118	0.171	0.232
45°	0.016	0.029		0.045	0.065	0.089	0.116	0.181	0.260	0.354			
30 x 6	1.25	1.07	CFM		333	444	555	666	777	888	1110	1332	1554
			NC		-	-	12	18	23	27	33	39	43
			Throw (ft.)	0°	11-18-34	16-24-39	20-30-43	24-34-47	28-36-51	32-39-55	35-43-61	39-47-67	42-51-72
				22.5°	9-14-26	12-18-30	15-23-34	18-26-37	22-28-40	25-30-42	27-34-47	30-37-52	32-40-56
				45°	5-8-15	7-11-17	9-13-19	11-15-21	13-16-23	14-17-25	16-19-28	17-21-30	19-23-33
36 x 6	1.50	1.29	CFM		405	540	675	810	945	1080	1350	1620	1890
			NC		-	-	13	19	23	27	34	39	44
			Throw (ft.)	0°	12-20-37	18-26-43	22-33-48	26-37-52	31-40-57	35-43-60	39-48-68	43-52-74	46-57-80
				22.5°	9-15-29	14-20-33	17-25-37	20-29-41	24-31-44	27-33-47	30-37-52	33-41-57	36-44-62
				45°	5-9-17	8-12-19	10-15-21	12-17-24	14-18-25	16-19-27	18-21-30	19-24-33	21-25-36
42 x 6	1.75	1.50	CFM		477	636	795	954	1113	1272	1590	1908	2226
			NC		-	-	14	19	24	28	35	40	45
			Throw (ft.)	0°	13-21-40	19-29-46	24-36-52	29-40-57	33-43-61	38-46-66	42-52-73	46-57-80	50-61-87
				22.5°	10-17-31	15-22-36	18-28-40	22-31-44	26-34-48	29-36-51	33-40-57	36-44-62	39-48-67
				45°	6-10-18	9-13-21	11-16-23	13-18-26	15-20-28	17-21-30	19-23-33	21-26-36	23-28-39
48 x 6	2.00	1.72	CFM		546	728	910	1092	1274	1456	1820	2184	2548
			NC		-	-	15	20	25	29	35	41	45
			Throw (ft.)	0°	14-23-43	20-31-50	25-38-55	31-43-61	36-46-66	41-50-70	45-55-78	50-61-86	54-66-93
				22.5°	11-18-33	16-24-38	20-30-43	24-33-47	28-36-51	31-38-54	35-43-61	38-47-67	42-51-72
				45°	6-10-19	9-14-22	11-17-25	14-19-27	16-21-30	18-22-32	20-25-35	22-27-39	24-30-42
8 x 8	0.44	0.37	CFM		111	148	185	222	259	296	370	444	518
			NC		-	-	-	13	18	22	29	34	39
			Throw (ft.)	0°	6-10-19	9-14-22	11-17-25	14-19-27	16-21-30	18-22-32	20-25-35	22-27-39	24-30-42
				22.5°	5-8-15	7-11-17	9-13-19	11-15-21	12-16-23	14-17-25	16-19-27	17-21-30	19-23-32
				45°	3-5-9	4-6-10	5-8-11	6-9-12	7-9-13	8-10-14	9-11-16	10-12-17	11-13-19
12 x 8	0.67	0.57	CFM		171	228	285	342	399	456	570	684	798
			NC		-	-	-	15	20	24	30	36	40
			Throw (ft.)	0°	8-13-24	11-17-28	14-21-31	17-24-34	20-26-37	23-28-39	25-31-44	28-34-48	30-37-52
				22.5°	6-10-19	9-13-22	11-17-24	13-19-26	15-20-28	18-22-30	20-24-34	22-26-37	23-28-40
				45°	4-6-11	5-8-12	6-10-14	8-11-15	9-12-17	10-12-18	11-14-20	12-15-22	13-17-23
18 x 8	1.00	0.87	CFM		264	352	440	528	616	704	880	1056	1232
			NC		-	-	11	17	22	26	32	38	42
			Throw (ft.)	0°	10-16-30	14-21-34	18-27-39	21-30-42	25-32-46	28-34-49	31-39-55	34-42-60	37-46-65
				22.5°	8-12-23	11-16-27	14-21-30	16-23-33	19-25-35	22-27-38	24-30-42	27-33-46	29-35-50
				45°	4-7-13	6-10-16	8-12-17	10-13-19	11-15-21	13-16-22	14-17-25	16-19-27	17-21-29
27 x 8	1.50	1.32	CFM		405	540	675	810	945	1080	1350	1620	1890
			NC		-	-	13	19	23	27	34	39	44
			Throw (ft.)	0°	12-20-37	18-26-43	22-33-48	26-37-52	31-40-57	35-43-60	39-48-68	43-52-74	46-57-80
				22.5°	9-15-29	14-20-33	17-25-37	20-29-41	24-31-44	27-33-47	30-37-52	33-41-57	36-44-62
				45°	5-9-17	8-12-19	10-15-21	12-17-24	14-18-25	16-19-27	18-21-30	19-24-33	21-25-36
30 x 8	1.67	1.47	CFM		447	596	745	894	1043	1192	1490	1788	2086
			NC		-	-	14	19	24	28	34	40	44
			Throw (ft.)	0°	13-21-39	18-28-45	23-35-50	28-39-55	32-42-59	37-45-63	41-50-71	45-55-78	48-59-84
				22.5°	10-16-30	14-21-35	18-27-39	21-30-43	25-33-46	28-35-49	32-39-55	35-43-60	38-46-65
				45°	6-9-17	8-12-20	10-16-23	12-17-25	15-19-27	16-20-29	18-23-32	20-25-35	22-27-38
36 x 8	2.00	1.77	CFM		546	728	910	1092	1274	1456	1820	2184	2548
			NC		-	-	15	20	25	29	35	41	45
			Throw (ft.)	0°	14-23-43	20-31-50	25-38-55	31-43-61	36-46-66	41-50-70	45-55-78	50-61-86	54-66-93
				22.5°	11-18-33	16-24-38	20-30-43	24-33-47	28-36-51	31-38-54	35-43-61	38-47-67	42-51-72
				45°	6-10-19	9-14-22	11-17-25	14-19-27	16-21-30	18-22-32	20-25-35	22-27-39	24-30-42

1. Tests conducted in accordance with ANSI/ASHRAE Standard 70-2006 and performance data includes damper.
2. The values 0°, 22.5°, and 45° are horizontal blade deflection angles. For 20°, use the 0° throw value and the 22.5° total pressure value.
3. Units: Core Velocity - Feet Per Minute (FPM); Total Pressure - in. wc.; Throw - ft. at 150, 100, and 50 fpm terminal velocity.
4. NC is based upon 10 dB room absorption (Re: 10<sup>-12</sup> watts) evaluated at 125 through 4000 Hz octave bands at 0° blade deflection. For 22.5° and 45°, increase stated NC level by 1 and 7 respectively. Dash "-" indicates NC value less than 10.
5. For values without a damper, multiply listed throw value by 0.97, multiply total pressure by 0.88, and reduce NC by 4.



# ENGINEERING DATA

## AV/AVS

Nominal Duct Size (in. <sup>2</sup> )	Nominal Duct Area (ft. <sup>2</sup> )	Core Area (ft. <sup>2</sup> )	Core Velocity		300	400	500	600	700	800	1000	1200	1400
			Velocity Pressure		0.006	0.010	0.016	0.022	0.031	0.040	0.062	0.090	0.122
			Total Pressure	0°	0.010	0.017	0.027	0.038	0.052	0.068	0.106	0.153	0.208
22.5°	0.011	0.019		0.030	0.043	0.058	0.076	0.118	0.171	0.232			
45°	0.016	0.029		0.045	0.065	0.089	0.116	0.181	0.260	0.354			
42 x 8	2.33	2.08	CFM		642	856	1070	1284	1498	1712	2140	2568	2996
			NC		-	-	15	21	25	29	36	41	46
			Throw (ft.)	0°	15-25-47	22-33-54	28-41-60	33-47-66	39-50-71	44-54-76	49-60-85	54-66-93	58-71-101
				22.5°	12-19-36	17-26-42	21-32-47	26-36-51	30-39-55	34-42-59	38-47-66	42-51-72	45-55-78
				45°	7-11-21	10-15-24	12-19-27	15-21-30	17-23-32	20-24-34	22-27-38	24-30-42	26-32-45
48 x 8	2.67	2.38	CFM		738	984	1230	1476	1722	1968	2460	2952	3444
			NC		-	-	16	21	26	30	36	42	47
			Throw (ft.)	0°	16-27-50	24-36-58	30-44-64	36-50-71	41-54-76	47-58-82	53-64-91	58-71-100	62-76-108
				22.5°	13-21-39	18-28-45	23-34-50	28-39-55	32-42-59	36-45-63	41-50-71	45-55-77	48-59-84
				45°	7-12-22	11-16-26	13-20-29	16-22-32	19-24-34	21-26-37	24-29-41	26-32-45	28-34-49
10 x 10	0.69	0.59	CFM		177	236	295	354	413	472	590	708	826
			NC		-	-	-	15	20	24	31	36	41
			Throw (ft.)	0°	8-13-24	12-17-28	14-22-32	17-24-35	20-26-37	23-28-40	26-32-45	28-35-49	31-37-53
				22.5°	6-10-19	9-13-22	11-17-24	13-19-27	16-20-29	18-22-31	20-24-35	22-27-38	24-29-41
				45°	4-6-11	5-8-13	7-10-14	8-11-16	9-12-17	10-13-18	12-14-20	13-16-22	14-17-24
12 x 10	0.83	0.72	CFM		216	288	360	432	504	576	720	864	1008
			NC		-	-	11	16	21	25	31	37	41
			Throw (ft.)	0°	9-14-27	13-19-31	16-24-35	19-27-38	22-29-41	25-31-44	28-35-49	31-38-54	34-41-58
				22.5°	7-11-21	10-15-24	12-19-27	15-21-30	17-23-32	20-24-34	22-27-38	24-30-42	26-32-45
				45°	4-6-12	6-9-14	7-11-16	9-12-17	10-13-19	11-14-20	13-16-22	14-17-24	15-19-26
18 x 10	1.25	1.11	CFM		333	444	555	666	777	888	1110	1332	1554
			NC		-	-	12	18	23	27	33	39	43
			Throw (ft.)	0°	11-18-34	16-24-39	20-30-43	24-34-47	28-36-51	32-39-55	35-43-61	39-47-67	42-51-72
				22.5°	9-14-26	12-18-30	15-23-34	18-26-37	22-28-40	25-30-42	27-34-47	30-37-52	32-40-56
				45°	5-8-15	7-11-17	9-13-19	11-15-21	13-16-23	14-17-25	16-19-28	17-21-30	19-23-33
22 x 10	1.53	1.37	CFM		411	548	685	822	959	1096	1370	1644	1918
			NC		-	-	13	19	23	27	34	39	44
			Throw (ft.)	0°	12-20-37	18-27-43	22-33-48	27-37-53	31-40-57	35-43-61	39-48-68	43-53-75	46-57-81
				22.5°	9-15-29	14-21-33	17-26-37	21-29-41	24-31-44	27-33-47	30-37-53	33-41-58	36-44-62
				45°	6-9-17	8-12-19	10-15-22	12-17-24	14-18-26	16-19-27	18-22-31	19-24-34	21-26-36
24 x 10	1.67	1.49	CFM		447	596	745	894	1043	1192	1490	1788	2086
			NC		-	-	14	19	24	28	34	40	44
			Throw (ft.)	0°	13-21-39	18-28-45	23-35-50	28-39-55	32-42-59	37-45-63	41-50-71	45-55-78	48-59-84
				22.5°	10-16-30	14-21-35	18-27-39	21-30-43	25-33-46	28-35-49	32-39-55	35-43-60	38-46-65
				45°	6-9-17	8-12-20	10-16-23	12-17-25	15-19-27	16-20-29	18-23-32	20-25-35	22-27-38
36 x 10	2.50	2.26	CFM		687	916	1145	1374	1603	1832	2290	2748	3206
			NC		-	-	15	21	26	30	36	42	46
			Throw (ft.)	0°	16-26-48	23-34-56	29-43-62	34-48-68	40-52-74	45-56-79	51-62-88	56-68-96	60-74-104
				22.5°	12-20-37	18-27-43	22-33-48	27-37-53	31-40-57	35-43-61	39-48-68	43-53-75	47-57-81
				45°	7-12-22	10-15-25	13-19-28	15-22-31	18-23-33	20-25-35	23-28-40	25-31-43	27-33-47
48 x 10	3.33	3.04	CFM		933	1244	1555	1866	2177	2488	3110	3732	4354
			NC		-	-	17	22	27	31	37	43	48
			Throw (ft.)	0°	18-30-56	27-40-65	33-50-72	40-56-79	47-61-86	53-65-92	59-72-103	65-79-112	70-86-121
				22.5°	14-23-44	21-31-50	26-39-56	31-44-62	36-47-66	41-50-71	46-56-79	50-62-87	54-66-94
				45°	8-13-25	12-18-29	15-22-33	18-25-36	21-27-39	24-29-41	27-33-46	29-36-51	32-39-55
12 x 12	1.00	0.88	CFM		264	352	440	528	616	704	880	1056	1232
			NC		-	-	11	17	22	26	32	38	42
			Throw (ft.)	0°	10-16-30	14-21-34	18-27-39	21-30-42	25-32-46	28-34-49	31-39-55	34-42-60	37-46-65
				22.5°	8-12-23	11-16-27	14-21-30	16-23-33	19-25-35	22-27-38	24-30-42	27-33-46	29-35-50
				45°	4-7-13	6-10-16	8-12-17	10-13-19	11-15-21	13-16-22	14-17-25	16-19-27	17-21-29

1. Tests conducted in accordance with ANSI/ASHRAE Standard 70-2006 and performance data includes damper.
2. The values 0°, 22.5°, and 45° are horizontal blade deflection angles. For 20°, use the 0° throw value and the 22.5° total pressure value.
3. Units: Core Velocity - Feet Per Minute (FPM); Total Pressure - in. wc.; Throw - ft. at 150, 100, and 50 fpm terminal velocity.
4. NC is based upon 10 dB room absorption (Re: 10<sup>-12</sup> watts) evaluated at 125 through 4000 Hz octave bands at 0° blade deflection. For 22.5° and 45°, increase stated NC level by 1 and 7 respectively. Dash "-" indicates NC value less than 10.
5. For values without a damper, multiply listed throw value by 0.97, multiply total pressure by 0.88, and reduce NC by 4.



# ENGINEERING DATA

## AV/AVS

Nominal Duct Size (in. <sup>2</sup> )	Nominal Duct Area (ft. <sup>2</sup> )	Core Area (ft. <sup>2</sup> )	Core Velocity		300	400	500	600	700	800	1000	1200	1400
			Velocity Pressure		0.006	0.010	0.016	0.022	0.031	0.040	0.062	0.090	0.122
			Total Pressure	0°	0.010	0.017	0.027	0.038	0.052	0.068	0.106	0.153	0.208
22.5°	0.011	0.019		0.030	0.043	0.058	0.076	0.118	0.171	0.232			
45°	0.016	0.029		0.045	0.065	0.089	0.116	0.181	0.260	0.354			
18 x 12	1.50	1.35	CFM		405	540	675	810	945	1080	1350	1620	1890
			NC		-	-	13	19	23	27	34	39	44
			Throw (ft.)	0°	12-20-37	18-26-43	22-33-48	26-37-52	31-40-57	35-43-60	39-48-68	43-52-74	46-57-80
				22.5°	9-15-29	14-20-33	17-25-37	20-29-41	24-31-44	27-33-47	30-37-52	33-41-57	36-44-62
				45°	5-9-17	8-12-19	10-15-21	12-17-24	14-18-25	16-19-27	18-21-30	19-24-33	21-25-36
24 x 12	2.00	1.82	CFM		546	728	910	1092	1274	1456	1820	2184	2548
			NC		-	-	15	20	25	29	35	41	45
			Throw (ft.)	0°	14-23-43	20-31-50	25-38-55	31-43-61	36-46-66	41-50-70	45-55-78	50-61-86	54-66-93
				22.5°	11-18-33	16-24-38	20-30-43	24-33-47	28-36-51	31-38-54	35-43-61	38-47-67	42-51-72
				45°	6-10-19	9-14-22	11-17-25	14-19-27	16-21-30	18-22-32	20-25-35	22-27-39	24-30-42
30 x 12	2.50	2.29	CFM		687	916	1145	1374	1603	1832	2290	2748	3206
			NC		-	-	15	21	26	30	36	42	46
			Throw (ft.)	0°	16-26-48	23-34-56	29-43-62	34-48-68	40-52-74	45-56-79	51-62-88	56-68-96	60-74-104
				22.5°	12-20-37	18-27-43	22-33-48	27-37-53	31-40-57	35-43-61	39-48-68	43-53-75	47-57-81
				45°	7-12-22	10-15-25	13-19-28	15-22-31	18-23-33	20-25-35	23-28-40	25-31-43	27-33-47
36 x 12	3.00	2.75	CFM		825	1100	1375	1650	1925	2200	2750	3300	3850
			NC		-	-	16	22	26	30	37	42	47
			Throw (ft.)	0°	17-28-53	25-38-61	31-47-68	38-53-75	44-57-81	50-61-86	56-68-96	61-75-106	66-81-114
				22.5°	13-22-41	19-29-47	24-36-53	29-41-58	34-44-63	39-47-67	43-53-75	47-58-82	51-63-88
				45°	8-13-24	11-17-27	14-21-31	17-24-34	20-26-36	22-27-39	25-31-43	27-34-48	30-36-51
42 x 12	3.50	3.22	CFM		966	1288	1610	1932	2254	2576	3220	3864	4508
			NC		-	-	17	22	27	31	38	43	48
			Throw (ft.)	0°	19-30-57	27-41-66	34-51-74	41-57-81	47-62-87	54-66-93	60-74-104	66-81-114	71-87-123
				22.5°	15-24-44	21-31-51	26-39-57	31-44-63	37-48-68	42-51-72	47-57-81	51-63-89	55-68-96
				45°	8-14-26	12-18-30	15-23-33	18-26-36	21-28-39	24-30-42	27-33-47	30-36-51	32-39-56
48 x 12	4.00	3.69	CFM		1125	1500	1875	2250	2625	3000	3750	4500	5250
			NC		-	11	18	23	28	32	38	44	48
			Throw (ft.)	0°	20-33-62	29-44-71	37-55-80	44-62-87	51-67-94	58-71-101	65-80-113	71-87-123	77-94-133
				22.5°	16-25-48	23-34-55	28-42-62	34-48-68	40-52-73	45-55-78	50-62-87	55-68-96	60-73-103
				45°	9-15-28	13-20-32	16-25-36	20-28-39	23-30-42	26-32-45	29-36-51	32-39-55	35-42-60
14 x 14	1.36	1.22	CFM		366	488	610	732	854	976	1220	1464	1708
			NC		-	-	13	18	23	27	34	39	44
			Throw (ft.)	0°	12-19-35	17-25-41	21-31-45	25-35-50	29-38-54	33-41-57	37-45-64	41-50-70	44-54-76
				22.5°	9-15-27	13-19-31	16-24-35	19-27-39	23-29-42	26-31-45	29-35-50	31-36-55	34-42-59
				45°	5-8-16	8-11-18	9-14-20	11-16-22	13-17-24	15-18-26	17-20-29	18-22-32	20-24-34
18 x 14	1.75	1.59	CFM		477	636	795	954	1113	1272	1590	1908	2226
			NC		-	-	14	19	24	28	35	40	45
			Throw (ft.)	0°	13-21-40	19-29-46	24-36-52	29-40-57	33-43-61	38-46-66	42-52-73	46-57-80	50-61-87
				22.5°	10-17-31	15-22-36	18-28-40	22-31-44	26-34-48	29-36-51	33-40-57	36-44-62	39-48-67
				45°	6-10-18	9-13-21	11-16-23	13-18-26	15-20-28	17-21-30	19-23-33	21-26-36	23-28-39
24 x 14	2.33	2.14	CFM		642	856	1070	1284	1498	1712	2140	2568	2996
			NC		-	-	15	21	25	29	36	41	46
			Throw (ft.)	0°	15-25-47	22-33-54	28-41-60	33-47-66	39-50-71	44-54-76	49-60-85	54-66-93	58-71-101
				22.5°	12-19-36	17-26-42	21-32-47	26-36-51	30-39-55	34-42-59	38-47-66	42-51-72	45-55-78
				45°	7-11-21	10-15-24	12-19-27	15-21-30	17-23-32	20-24-34	22-27-38	24-30-42	26-32-45
36 x 14	3.50	3.24	CFM		966	1288	1610	1932	2254	2576	3220	3864	4508
			NC		-	-	17	22	27	31	38	43	48
			Throw (ft.)	0°	19-30-57	27-41-66	34-51-74	41-57-81	47-62-87	54-66-93	60-74-104	66-81-114	71-87-123
				22.5°	15-24-44	21-31-51	26-39-57	31-44-63	37-48-68	42-51-72	47-57-81	51-63-89	55-68-96
				45°	8-14-26	12-18-30	15-23-33	18-26-36	21-28-39	24-30-42	27-33-47	30-36-51	32-39-56

1. Tests conducted in accordance with ANSI/ASHRAE Standard 70-2006 and performance data includes damper.
2. The values 0°, 22.5°, and 45° are horizontal blade deflection angles. For 20°, use the 0° throw value and the 22.5° total pressure value.
3. Units: Core Velocity - Feet Per Minute (FPM); Total Pressure - in. wc.; Throw - ft. at 150, 100, and 50 fpm terminal velocity.
4. NC is based upon 10 dB room absorption (Re: 10<sup>-12</sup> watts) evaluated at 125 through 4000 Hz octave bands at 0° blade deflection. For 22.5° and 45°, increase stated NC level by 1 and 7 respectively. Dash "-" indicates NC value less than 10.
5. For values without a damper, multiply listed throw value by 0.97, multiply total pressure by 0.88, and reduce NC by 4.



# ENGINEERING DATA

## AV/AVS

Nominal Duct Size (in. <sup>2</sup> )	Nominal Duct Area (ft. <sup>2</sup> )	Core Area (ft. <sup>2</sup> )	Core Velocity		300	400	500	600	700	800	1000	1200	1400
			Velocity Pressure		0.006	0.010	0.016	0.022	0.031	0.040	0.062	0.090	0.122
			Total Pressure	0°	0.010	0.017	0.027	0.038	0.052	0.068	0.106	0.153	0.208
22.5°	0.011	0.019		0.030	0.043	0.058	0.076	0.118	0.171	0.232			
45°	0.016	0.029		0.045	0.065	0.089	0.116	0.181	0.260	0.354			
16 x 16	1.78	1.62	CFM		486	648	810	972	1134	1296	1620	1944	2268
			NC		-	-	14	19	24	28	35	40	45
			Throw (ft.)	0°	13-22-41	19-29-47	24-36-52	29-41-57	34-44-62	38-47-66	43-52-74	47-57-81	51-62-88
				22.5°	10-17-31	15-22-36	19-28-41	22-31-44	26-34-48	30-36-51	33-41-57	36-44-63	39-48-68
				45°	6-10-18	9-13-21	11-16-24	13-18-26	15-20-28	17-21-30	19-24-33	21-26-36	23-28-39
18 x 16	2.00	1.83	CFM		546	728	910	1092	1274	1456	1820	2184	2548
			NC		-	-	15	20	25	29	35	41	45
			Throw (ft.)	0°	14-23-43	20-31-50	25-38-55	31-43-61	36-46-66	41-50-70	45-55-78	50-61-86	54-66-93
				22.5°	11-18-33	16-24-38	20-30-43	24-33-47	28-36-51	31-38-54	35-43-61	38-47-67	42-51-72
				45°	6-10-19	9-14-22	11-17-25	14-19-27	16-21-30	18-22-32	20-25-35	22-27-39	24-30-42
24 x 16	2.67	2.46	CFM		738	984	1230	1476	1722	1968	2460	2952	3444
			NC		-	-	16	21	26	30	36	42	47
			Throw (ft.)	0°	16-27-50	24-36-58	30-44-64	36-50-71	41-54-76	47-58-82	53-64-91	58-71-100	62-76-108
				22.5°	13-21-39	18-28-45	23-34-50	28-39-55	32-42-59	36-45-63	41-50-71	45-55-77	48-59-84
				45°	7-12-22	11-16-26	13-20-29	16-22-32	19-24-34	21-26-37	24-29-41	26-32-45	28-34-49
30 x 16	3.33	3.10	CFM		933	1244	1555	1866	2177	2488	3110	3732	4354
			NC		-	-	17	22	27	31	37	43	48
			Throw (ft.)	0°	18-30-56	27-40-65	33-50-72	40-56-79	47-61-86	53-65-92	59-72-103	65-79-112	70-86-121
				22.5°	14-23-44	21-31-50	26-39-56	31-44-62	36-47-66	41-50-71	46-56-79	50-62-87	54-66-94
				45°	8-13-25	12-18-29	15-22-33	18-25-36	21-27-39	24-29-41	27-33-46	29-36-51	32-39-55
36 x 16	4.00	3.73	CFM		1125	1500	1875	2250	2625	3000	3750	4500	5250
			NC		-	11	18	23	28	32	38	44	48
			Throw (ft.)	0°	20-33-62	29-44-71	37-55-80	44-62-87	51-67-94	58-71-101	65-80-113	71-87-123	77-94-133
				22.5°	16-25-48	23-34-55	28-42-62	34-48-68	40-52-73	45-55-78	50-62-87	55-68-96	60-73-103
				45°	9-15-28	13-20-32	16-25-36	20-28-39	23-30-42	26-32-45	29-36-51	32-39-55	35-42-60
18 x 18	2.25	2.07	CFM		621	828	1035	1242	1449	1656	2070	2484	2898
			NC		-	-	15	21	25	29	36	41	46
			Throw (ft.)	0°	15-24-46	22-33-53	27-41-59	33-46-65	38-49-70	43-53-75	48-59-84	53-65-92	57-70-99
				22.5°	12-19-36	17-25-41	21-32-46	25-36-50	29-38-54	33-41-58	37-46-65	41-50-71	44-54-77
				45°	7-11-21	10-15-24	12-18-27	15-21-29	17-22-31	19-24-34	22-27-38	24-29-41	26-31-45
24 x 18	3.00	2.79	CFM		825	1100	1375	1650	1925	2200	2750	3300	3850
			NC		-	-	16	22	26	30	37	42	47
			Throw (ft.)	0°	17-28-53	25-38-61	31-47-68	38-53-75	44-57-81	50-61-86	56-68-96	61-75-106	66-81-114
				22.5°	13-22-41	19-29-47	24-36-53	29-41-58	34-44-63	39-47-67	43-53-75	47-58-82	51-63-88
				45°	8-13-24	11-17-27	14-21-31	17-24-34	20-26-36	22-27-39	25-31-43	27-34-48	30-36-51
30 x 18	3.75	3.50	CFM		1050	1400	1750	2100	2450	2800	3500	4200	4900
			NC		-	11	17	23	27	31	38	43	48
			Throw (ft.)	0°	20-32-60	28-42-69	35-53-77	42-60-84	49-64-91	56-69-97	63-77-109	69-84-119	74-91-129
				22.5°	15-25-46	22-33-53	27-41-60	33-46-65	38-50-71	44-53-75	49-60-84	53-65-92	58-71-100
				45°	9-14-27	13-19-31	16-24-35	19-27-38	22-29-41	25-31-44	28-35-49	31-38-54	33-41-58
36 x 18	4.50	4.22	CFM		1266	1688	2110	2532	2954	3376	4220	5064	5908
			NC		-	11	18	23	28	32	39	44	49
			Throw (ft.)	0°	21-35-65	31-47-76	39-58-84	47-65-93	54-71-100	62-76-107	69-84-119	76-93-131	82-100-141
				22.5°	17-27-51	24-36-59	30-45-65	36-51-72	42-55-77	48-59-83	53-65-93	59-72-101	63-77-110
				45°	10-16-29	14-21-34	17-26-38	21-29-42	24-32-45	28-34-48	31-38-54	34-42-59	37-45-64
42 x 18	5.25	4.94	CFM		1482	1976	2470	2964	3458	3952	4940	5928	6916
			NC		-	12	19	24	29	33	39	45	49
			Throw (ft.)	0°	23-38-71	34-50-82	42-63-91	50-71-100	59-76-108	67-82-116	75-91-129	82-100-142	88-108-153
				22.5°	18-29-55	26-39-63	33-49-71	39-55-78	46-59-84	52-63-90	58-71-100	63-78-110	68-84-118
				45°	10-17-32	15-23-37	19-28-41	23-32-45	26-34-49	30-37-52	34-41-58	37-45-64	40-49-69

1. Tests conducted in accordance with ANSI/ASHRAE Standard 70-2006 and performance data includes damper.
2. The values 0°, 22.5°, and 45° are horizontal blade deflection angles. For 20°, use the 0° throw value and the 22.5° total pressure value.
3. Units: Core Velocity - Feet Per Minute (FPM); Total Pressure - in. wc.; Throw - ft. at 150, 100, and 50 fpm terminal velocity.
4. NC is based upon 10 dB room absorption (Re: 10<sup>-12</sup> watts) evaluated at 125 through 4000 Hz octave bands at 0° blade deflection. For 22.5° and 45°, increase stated NC level by 1 and 7 respectively. Dash "-" indicates NC value less than 10.
5. For values without a damper, multiply listed throw value by 0.97, multiply total pressure by 0.88, and reduce NC by 4.



# ENGINEERING DATA

## AV/AVS

Nominal Duct Size (in. <sup>2</sup> )	Nominal Duct Area (ft. <sup>2</sup> )	Core Area (ft. <sup>2</sup> )	Core Velocity		300	400	500	600	700	800	1000	1200	1400
			Velocity Pressure		0.006	0.010	0.016	0.022	0.031	0.040	0.062	0.090	0.122
			Total Pressure	0°	0.010	0.017	0.027	0.038	0.052	0.068	0.106	0.153	0.208
				22.5°	0.011	0.019	0.030	0.043	0.058	0.076	0.118	0.171	0.232
		45°	0.016	0.029	0.045	0.065	0.089	0.116	0.181	0.260	0.354		
48 x 18	6.00	5.66	CFM		1698	2264	2830	3396	3962	4528	5660	6792	7924
			NC		-	13	19	25	29	33	40	45	50
			Throw (ft.)	0°	25-40-76	36-54-87	45-67-98	54-76-107	63-82-116	71-87-124	80-98-138	87-107-152	94-116-164
				22.5°	19-31-59	28-42-68	35-52-76	42-59-83	49-63-90	55-68-96	62-76-107	68-83-117	73-90-127
				45°	11-18-34	16-24-39	20-30-44	24-34-48	28-37-52	32-39-56	36-44-62	39-48-68	43-52-74
20 x 20	2.78	2.57	CFM		771	1028	1285	1542	1799	2056	2570	3084	3598
			NC		-	-	16	21	26	30	37	42	47
			Throw (ft.)	0°	17-27-51	24-36-59	30-45-66	36-51-72	42-55-78	48-59-83	54-66-93	59-72-102	64-78-110
				22.5°	13-21-40	19-28-46	23-35-51	28-40-56	33-43-60	37-46-65	42-51-72	46-56-79	49-60-85
				45°	8-12-23	11-16-27	14-20-30	16-23-32	19-25-35	22-27-38	24-30-42	27-32-46	29-35-50
24 x 20	3.33	3.11	CFM		933	1244	1555	1866	2177	2488	3110	3732	4354
			NC		-	-	17	22	27	31	37	43	48
			Throw (ft.)	0°	18-30-56	27-40-65	33-50-72	40-56-79	47-61-86	53-65-92	59-72-103	65-79-112	70-86-121
				22.5°	14-23-44	21-31-50	26-39-56	31-44-62	36-47-66	41-50-71	46-56-79	50-62-87	54-66-94
				45°	8-13-25	12-18-29	15-22-33	18-25-36	21-27-39	24-29-41	27-33-46	29-36-51	32-39-55
36 x 20	5.00	4.71	CFM		1413	1884	2355	2826	3297	3768	4710	5652	6594
			NC		-	12	18	24	29	33	39	45	49
			Throw (ft.)	0°	23-37-69	33-49-80	41-61-89	49-69-98	57-75-106	65-80-113	73-89-126	80-98-138	86-106-149
				22.5°	18-29-54	25-38-62	32-48-69	38-54-76	44-58-82	50-62-87	56-69-98	62-76-107	67-82-116
				45°	10-17-31	15-22-36	18-28-40	22-31-44	26-34-48	29-36-51	33-40-57	36-44-62	39-48-67
42 x 20	5.83	5.51	CFM		1653	2204	2755	3306	3857	4408	5510	6612	7714
			NC		-	12	19	25	29	33	40	45	50
			Throw (ft.)	0°	25-40-75	35-53-86	44-66-96	53-75-106	62-81-114	70-86-122	79-96-136	86-106-149	93-114-161
				22.5°	19-31-58	27-41-67	34-51-75	41-58-75	48-63-88	55-67-95	61-75-106	67-82-116	72-88-125
				45°	11-18-34	16-24-39	20-30-43	24-34-48	28-36-51	32-39-55	35-43-61	39-48-67	42-51-73
22 x 22	3.36	3.14	CFM		942	1256	1570	1884	2198	2512	3140	3768	4396
			NC		-	-	17	22	27	31	38	43	48
			Throw (ft.)	0°	19-30-56	27-40-65	33-50-73	40-56-80	47-61-86	53-65-92	59-73-103	65-80-113	70-86-122
				22.5°	14-23-44	21-31-50	26-39-56	31-44-62	36-47-67	41-50-71	46-56-80	50-62-87	55-67-94
				45°	8-14-25	12-18-29	15-23-33	18-25-36	21-27-39	24-29-41	27-33-46	29-36-51	32-39-55
24 x 22	3.67	3.43	CFM		1029	1372	1715	2058	2401	2744	3430	4116	4802
			NC		-	-	17	23	27	31	38	43	48
			Throw (ft.)	0°	19-31-59	28-42-68	32-52-76	42-59-83	49-64-90	56-68-96	62-76-108	68-83-118	74-90-127
				22.5°	15-24-46	22-33-53	27-41-59	33-46-65	38-49-70	43-53-75	48-59-83	53-65-91	57-70-99
				45°	9-14-27	13-19-31	16-24-34	19-27-38	22-29-41	25-31-43	28-34-48	31-38-53	33-41-57
46 x 22	7.03	6.68	CFM		2004	2672	3340	4008	4676	5344	6680	8016	9352
			NC		-	13	20	25	30	34	41	46	51
			Throw (ft.)	0°	27-44-82	39-59-95	49-73-106	59-82-116	68-89-126	78-95-134	87-106-150	95-116-165	103-126-178
				22.5°	21-34-64	30-45-74	38-57-82	45-64-90	53-69-97	60-74-104	67-82-116	74-90-128	80-97-138
				45°	12-20-37	18-26-43	22-33-48	26-37-52	31-40-57	35-43-60	39-48-68	43-52-74	46-57-80
24 x 24	4.00	3.75	CFM		1125	1500	1875	2250	2625	3000	3750	4500	5250
			NC		-	11	18	23	28	32	38	44	48
			Throw (ft.)	0°	20-33-62	29-44-71	37-55-80	44-62-87	51-67-94	58-71-101	65-80-113	71-87-123	77-94-133
				22.5°	16-25-48	23-34-55	28-42-62	34-48-68	40-52-73	45-55-78	50-62-87	55-68-96	60-73-103
				45°	9-15-28	13-20-32	16-25-36	20-28-39	23-30-42	26-32-45	29-36-51	32-39-55	35-42-60
30 x 24	5.00	4.72	CFM		1413	1884	2355	2826	3297	3768	4710	5652	6594
			NC		-	12	18	24	29	33	39	45	49
			Throw (ft.)	0°	23-37-69	33-49-80	41-61-89	49-69-98	57-75-106	65-80-113	73-89-126	80-98-138	86-106-149
				22.5°	18-29-54	25-38-62	32-48-69	38-54-76	44-58-82	50-62-87	56-69-98	62-76-107	67-82-116
				45°	10-17-31	15-22-36	18-28-40	22-31-44	26-34-48	29-36-51	33-40-57	36-44-62	39-48-67

1. Tests conducted in accordance with ANSI/ASHRAE Standard 70-2006 and performance data includes damper.
2. The values 0°, 22.5°, and 45° are horizontal blade deflection angles. For 20°, use the 0° throw value and the 22.5° total pressure value.
3. Units: Core Velocity - Feet Per Minute (FPM); Total Pressure - in. wc.; Throw - ft. at 150, 100, and 50 fpm terminal velocity.
4. NC is based upon 10 dB room absorption (Re: 10<sup>-12</sup> watts) evaluated at 125 through 4000 Hz octave bands at 0° blade deflection. For 22.5° and 45°, increase stated NC level by 1 and 7 respectively. Dash "-" indicates NC value less than 10.
5. For values without a damper, multiply listed throw value by 0.97, multiply total pressure by 0.88, and reduce NC by 4.





# ENGINEERING DATA

## AV/AVS

Nominal Duct Size (in. <sup>2</sup> )	Nominal Duct Area (ft. <sup>2</sup> )	Core Area (ft. <sup>2</sup> )	Core Velocity		300	400	500	600	700	800	1000	1200	1400
			Velocity Pressure		0.006	0.010	0.016	0.022	0.031	0.040	0.062	0.090	0.122
			Total Pressure	0°	0.010	0.017	0.027	0.038	0.052	0.068	0.106	0.153	0.208
22.5°	0.011	0.019		0.030	0.043	0.058	0.076	0.118	0.171	0.232			
45°	0.016	0.029		0.045	0.065	0.089	0.116	0.181	0.260	0.354			
36 x 24	6.00	5.69	CFM		1698	2264	2830	3396	3962	4528	5660	6792	7924
			NC		-	13	19	25	29	33	40	45	50
			Throw (ft.)	0°	25-40-76	36-54-87	45-67-98	54-76-107	63-82-116	71-87-124	80-98-138	87-107-152	94-116-164
				22.5°	19-31-59	28-42-68	35-52-76	42-59-83	49-63-90	55-68-96	62-76-107	68-83-117	73-90-127
				45°	11-18-34	16-24-39	20-30-44	24-34-48	28-37-52	32-39-56	36-44-62	39-48-68	43-52-74
42 x 24	7.00	6.66	CFM		1998	2664	3330	3996	4662	5328	6660	7992	9324
			NC		-	13	20	25	30	34	41	46	51
			Throw (ft.)	0°	27-44-82	39-58-95	49-73-106	58-82-116	68-89-126	77-95-134	87-106-150	95-116-164	102-126-178
				22.5°	21-34-64	30-45-74	38-57-82	45-64-90	53-69-97	60-74-104	67-82-116	74-90-127	79-97-138
				45°	12-20-37	18-26-43	22-33-48	26-37-52	31-40-56	35-43-60	39-48-68	43-52-74	46-56-80
48 x 24	8.00	7.63	CFM		2289	3052	3815	4578	5341	6104	7630	9156	10682
			NC		-	14	20	26	31	35	41	47	51
			Throw (ft.)	0°	29-47-88	42-63-102	52-78-114	63-88-124	73-95-134	83-102-144	93-114-161	102-124-176	110-134-190
				22.5°	22-36-68	32-48-79	40-61-88	48-68-96	57-74-104	64-79-111	72-88-124	79-96-136	85-104-147
				45°	13-21-40	19-28-46	23-35-51	28-40-56	33-43-60	37-46-65	42-51-72	46-56-79	49-60-86
28 x 28	5.44	5.16	CFM		1548	2064	2580	3096	3612	4128	5160	6192	7224
			NC		-	12	19	24	29	33	40	45	50
			Throw (ft.)	0°	24-39-72	34-51-84	43-64-93	51-72-102	60-78-110	68-84-118	76-93-132	84-102-145	90-110-156
				22.5°	18-30-56	27-40-65	33-50-72	40-56-79	47-61-86	53-65-92	59-72-102	65-79-112	70-86-121
				45°	11-17-33	15-23-38	19-29-42	23-33-46	27-35-50	31-38-53	34-42-59	38-46-65	41-50-70
30 x 28	5.83	5.54	CFM		1653	2204	2755	3306	3857	4408	5510	6612	7714
			NC		-	12	19	25	29	33	40	45	50
			Throw (ft.)	0°	25-40-75	35-53-86	44-66-96	53-75-106	62-81-114	70-86-122	79-96-136	86-106-149	93-114-161
				22.5°	19-31-58	27-41-67	34-51-75	41-58-75	48-63-88	55-67-95	61-75-106	67-82-116	72-88-125
				45°	11-18-34	16-24-39	20-30-43	24-34-48	28-36-51	32-39-55	35-43-61	39-48-67	42-51-73
36 x 28	7.00	6.67	CFM		1998	2664	3330	3996	4662	5328	6660	7992	9324
			NC		-	13	20	25	30	34	41	46	51
			Throw (ft.)	0°	27-44-82	39-58-95	49-73-106	58-82-116	68-89-126	77-95-134	87-106-150	95-116-164	102-126-178
				22.5°	21-34-64	30-45-74	38-57-82	45-64-90	53-69-97	60-74-104	67-82-116	74-90-127	79-97-138
				45°	12-20-37	18-26-43	22-33-48	26-37-52	31-40-56	35-43-60	39-48-68	43-52-74	46-56-80
30 x 30	6.25	5.94	CFM		1782	2376	2970	3564	4158	4752	5940	7128	8316
			NC		-	13	19	25	30	33	40	46	50
			Throw (ft.)	0°	25-41-78	37-55-90	46-69-100	55-78-110	64-84-119	73-90-127	82-100-142	90-110-155	97-119-168
				22.5°	20-32-60	29-43-69	36-53-78	43-60-85	50-65-92	57-69-98	63-78-110	69-85-120	75-92-130
				45°	11-19-35	17-25-40	21-31-45	25-35-49	29-38-53	33-40-57	37-45-64	40-49-70	44-53-75
36 x 30	7.50	7.16	CFM		2148	2864	3580	4296	5012	5728	7160	8592	10024
			NC		-	14	20	26	30	34	41	46	51
			Throw (ft.)	0°	28-45-85	40-61-98	50-76-110	61-85-121	71-92-130	80-98-139	90-110-156	98-121-170	106-130-184
				22.5°	22-35-66	31-47-76	39-59-85	47-66-93	55-71-101	62-76-108	70-85-121	76-93-132	82-101-143
				45°	13-20-38	18-27-44	23-34-50	27-38-54	32-41-59	36-44-63	40-50-70	44-54-77	48-59-83
42 x 30	8.75	8.38	CFM		2514	3352	4190	5028	5866	6704	8380	10056	11732
			NC		-	14	21	26	31	35	42	47	52
			Throw (ft.)	0°	30-49-92	44-66-106	55-82-119	66-92-130	76-100-141	87-106-151	97-119-168	106-130-184	115-141-199
				22.5°	23-38-71	34-51-82	42-64-92	51-71-101	59-77-109	67-82-117	75-92-130	82-101-143	89-109-154
				45°	14-22-41	20-29-48	25-37-54	29-41-59	34-45-63	39-48-68	44-54-76	48-59-83	52-63-90
48 x 30	10.00	9.60	CFM		2880	3840	4800	5760	6720	7680	9600	11520	13440
			NC		-	15	21	27	32	35	42	48	52
			Throw (ft.)	0°	32-53-99	47-70-114	58-88-127	70-99-140	82-107-151	93-114-161	104-127-180	114-140-197	123-151-213
				22.5°	25-41-76	36-54-88	45-68-99	54-76-108	63-83-117	72-88-125	81-99-140	88-108-153	95-117-165
				45°	15-24-44	21-32-51	26-39-57	32-44-63	37-48-68	42-51-73	47-57-81	51-63-89	55-68-96

1. Tests conducted in accordance with ANSI/ASHRAE Standard 70-2006 and performance data includes damper.
2. The values 0°, 22.5°, and 45° are horizontal blade deflection angles. For 20°, use the 0° throw value and the 22.5° total pressure value.
3. Units: Core Velocity - Feet Per Minute (FPM); Total Pressure - in. wc.; Throw - ft. at 150, 100, and 50 fpm terminal velocity.
4. NC is based upon 10 dB room absorption (Re: 10<sup>-12</sup> watts) evaluated at 125 through 4000 Hz octave bands at 0° blade deflection. For 22.5° and 45°, increase stated NC level by 1 and 7 respectively. Dash "-" indicates NC value less than 10.
5. For values without a damper, multiply listed throw value by 0.97, multiply total pressure by 0.88, and reduce NC by 4.



# ENGINEERING DATA

## AV/AVS

Nominal Duct Size (in. <sup>2</sup> )	Nominal Duct Area (ft. <sup>2</sup> )	Core Area (ft. <sup>2</sup> )	Core Velocity		300	400	500	600	700	800	1000	1200	1400
			Velocity Pressure		0.006	0.010	0.016	0.022	0.031	0.040	0.062	0.090	0.122
			Total Pressure	0°	0.010	0.017	0.027	0.038	0.052	0.068	0.106	0.153	0.208
22.5°	0.011	0.019		0.030	0.043	0.058	0.076	0.118	0.171	0.232			
45°	0.016	0.029		0.045	0.065	0.089	0.116	0.181	0.260	0.354			
32 x 32	7.11	6.78	CFM		2034	2712	3390	4068	4746	5424	6780	8136	9492
			NC		-	13	20	25	30	34	41	46	51
			Throw (ft.)	0°	27-44-83	39-59-96	49-74-107	59-83-117	69-90-127	78-96-135	87-107-151	96-117-166	103-127-179
				22.5°	21-34-64	30-46-74	38-57-83	46-64-91	53-69-98	61-74-105	68-83-117	74-91-129	80-98-139
				45°	12-20-37	18-27-43	22-33-48	27-37-53	31-40-57	35-43-61	39-48-68	43-53-75	47-57-81
36 x 32	8.00	7.65	CFM		2289	3052	3815	4578	5341	6104	7630	9156	10682
			NC		-	14	20	26	31	35	41	47	51
			Throw (ft.)	0°	29-47-88	42-63-102	52-78-114	63-88-124	73-95-134	83-102-144	93-114-161	102-124-176	110-134-190
				22.5°	22-36-68	32-48-79	40-61-88	48-68-96	57-74-104	64-79-111	72-88-124	79-96-136	85-104-147
				45°	13-21-40	19-28-46	23-35-51	28-40-56	33-43-60	37-46-65	42-51-72	46-56-79	49-60-86
34 x 34	8.03	7.68	CFM		2304	3072	3840	4608	5376	6144	7680	9216	10752
			NC		-	14	21	26	31	35	41	47	51
			Throw (ft.)	0°	29-47-88	42-63-102	52-78-114	63-88-125	73-95-135	83-102-144	93-114-161	102-125-176	110-135-191
				22.5°	22-36-88	32-49-79	41-61-88	49-68-97	57-74-104	64-79-112	72-88-125	79-97-137	85-104-148
				45°	13-21-40	19-28-46	24-35-51	28-40-56	33-43-61	37-46-65	42-51-73	46-56-79	50-61-86
36 x 34	8.50	8.14	CFM		2442	3256	4070	4884	5698	6512	8140	9768	11396
			NC		-	14	21	26	31	35	41	47	52
			Throw (ft.)	0°	30-48-91	43-65-105	54-81-117	65-91-128	75-98-139	86-105-148	96-117-166	105-128-182	113-139-196
				22.5°	23-38-70	33-50-81	42-63-91	50-70-100	58-76-108	66-81-115	74-91-129	81-100-141	88-108-152
				45°	13-22-41	19-29-47	24-36-53	29-41-58	34-44-62	39-47-67	43-53-75	47-58-82	51-62-88
42 x 34	9.92	9.52	CFM		2880	3840	4800	5760	6720	7680	9600	11520	13440
			NC		-	15	21	27	32	35	42	48	52
			Throw (ft.)	0°	32-53-99	47-70-114	58-88-127	70-99-140	82-107-151	93-114-161	104-127-180	114-140-197	123-151-213
				22.5°	25-41-76	36-54-88	45-68-99	54-76-108	63-83-117	72-88-125	81-99-140	88-108-153	95-117-165
				45°	15-24-44	21-32-51	26-39-57	32-44-63	37-48-68	42-51-73	47-57-81	51-63-89	55-68-96
46 x 34	10.86	10.45	CFM		3135	4180	5225	6270	7315	8360	10450	12540	14630
			NC		-	15	22	27	32	36	43	48	53
			Throw (ft.)	0°	34-55-103	49-73-119	61-92-133	73-103-146	85-111-157	97-119-168	109-133-188	119-146-206	128-157-222
				22.5°	26-43-80	38-57-92	47-71-103	57-80-113	66-86-122	75-92-130	84-103-146	92-113-160	99-122-172
				45°	15-25-46	22-33-53	27-41-60	33-46-66	38-50-71	44-53-76	49-60-85	53-66-93	58-71-100
36 x 36	9.00	8.63	CFM		2589	3452	4315	5178	6041	6904	8630	10356	12082
			NC		-	14	21	26	31	35	42	47	52
			Throw (ft.)	0°	31-50-94	44-67-108	55-83-121	67-94-132	78-101-143	88-108-153	99-121-171	108-132-187	117-143-202
				22.5°	24-39-72	34-52-84	43-64-94	52-72-103	60-78-111	68-84-118	76-94-132	84-103-145	90-111-157
				45°	14-22-42	20-30-49	25-37-54	30-42-60	35-45-64	40-49-69	44-54-77	49-60-84	53-64-91
42 x 36	10.50	10.10	CFM		3030	4040	5050	6060	7070	8080	10100	12120	14140
			NC		-	15	22	27	32	36	42	48	52
			Throw (ft.)	0°	33-54-101	48-72-117	60-90-131	72-101-143	84-109-155	95-117-165	107-131-185	117-143-202	126-155-219
				22.5°	26-42-78	37-56-91	46-70-101	56-78-111	65-85-120	74-91-128	83-101-143	91-111-157	98-120-169
				45°	15-24-46	22-32-53	27-40-59	32-46-64	38-49-70	43-53-74	48-59-83	53-64-91	57-70-98
48 x 36	12.00	11.57	CFM		3471	4628	5785	6942	8099	9256	11570	13884	16198
			NC		-	16	22	28	32	36	43	48	53
			Throw (ft.)	0°	36-58-108	51-77-125	64-96-140	77-108-153	90-117-165	102-125-177	114-140-198	125-153-217	135-165-234
				22.5°	28-45-84	40-60-97	50-75-108	60-84-119	70-91-128	79-97-137	88-108-153	97-119-168	105-128-181
				45°	16-26-49	23-35-56	29-43-63	35-49-69	40-53-74	46-56-80	51-63-89	56-69-97	61-74-105
38 x 38	10.03	9.64	CFM		2892	3856	4820	5784	6748	7712	9640	11568	13496
			NC		-	15	21	27	32	36	42	48	52
			Throw (ft.)	0°	32-53-99	47-70-114	59-88-128	70-99-140	82-107-151	93-114-161	104-128-181	114-140-198	123-151-214
				22.5°	25-41-77	36-54-88	45-68-99	54-77-108	64-83-117	72-88-125	81-99-140	88-108-153	96-117-166
				45°	15-24-44	21-32-51	26-40-57	32-44-63	37-48-68	42-51-73	47-57-81	51-63-89	55-68-96

1. Tests conducted in accordance with ANSI/ASHRAE Standard 70-2006 and performance data includes damper.
2. The values 0°, 22.5°, and 45° are horizontal blade deflection angles. For 20°, use the 0° throw value and the 22.5° total pressure value.
3. Units: Core Velocity - Feet Per Minute (FPM); Total Pressure - in. wc.; Throw - ft. at 150, 100, and 50 fpm terminal velocity.
4. NC is based upon 10 dB room absorption (Re: 10<sup>-12</sup> watts) evaluated at 125 through 4000 Hz octave bands at 0° blade deflection. For 22.5° and 45°, increase stated NC level by 1 and 7 respectively. Dash "-" indicates NC value less than 10.
5. For values without a damper, multiply listed throw value by 0.97, multiply total pressure by 0.88, and reduce NC by 4.





# ENGINEERING DATA

## AV/AVS

Nominal Duct Size (in. <sup>2</sup> )	Nominal Duct Area (ft. <sup>2</sup> )	Core Area (ft. <sup>2</sup> )	Core Velocity		300	400	500	600	700	800	1000	1200	1400
			Velocity Pressure		0.006	0.010	0.016	0.022	0.031	0.040	0.062	0.090	0.122
			Total Pressure	0°	0.010	0.017	0.027	0.038	0.052	0.068	0.106	0.153	0.208
22.5°	0.011	0.019		0.030	0.043	0.058	0.076	0.118	0.171	0.232			
45°	0.016	0.029		0.045	0.065	0.089	0.116	0.181	0.260	0.354			
42 x 38	11.08	10.67	CFM		3201	4268	5335	6402	7469	8536	10670	12804	14938
			NC		-	15	22	27	32	36	43	48	53
			Throw (ft.)	0°	34-55-104	49-74-120	62-92-134	74-104-147	86-112-159	98-120-170	110-134-190	120-147-208	130-159-225
				22.5°	26-43-81	38-57-93	48-72-104	57-81-114	67-87-123	76-93-132	85-104-147	93-114-161	101-123-174
				45°	15-25-47	22-33-54	28-42-60	33-47-66	39-51-71	44-54-76	49-60-85	54-66-94	58-71-101
40 x 40	11.11	10.70	CFM		3210	4280	5350	6420	7490	8560	10700	12840	14980
			NC		-	15	22	27	32	36	43	48	53
			Throw (ft.)	0°	34-56-104	49-74-120	62-93-134	74-104-147	86-113-159	98-120-170	110-134-190	120-147-208	130-159-225
				22.5°	26-43-81	38-57-93	48-72-104	57-81-114	67-87-123	76-93-132	85-104-147	93-114-161	101-123-174
				45°	15-25-47	22-33-54	28-42-61	33-47-66	39-51-72	44-54-77	49-61-86	54-66-94	58-72-101
42 x 42	12.25	11.82	CFM		3546	4728	5910	7092	8274	9456	11820	14184	16548
			NC		-	16	22	28	32	36	43	48	53
			Throw (ft.)	0°	36-58-109	52-78-126	65-97-141	78-109-155	91-118-167	103-126-179	115-141-200	126-155-219	137-167-236
				22.5°	28-45-85	40-60-98	50-75-110	60-85-120	70-92-130	80-98-139	89-110-155	98-120-170	106-130-183
				45°	16-26-49	23-35-57	29-44-64	35-49-70	41-53-75	46-57-80	52-64-90	57-70-99	61-75-106
48 x 42	14.00	13.54	CFM		4062	5416	6770	8124	9478	10832	13540	16248	18956
			NC		-	16	23	28	33	37	44	49	54
			Throw (ft.)	0°	38-62-117	56-83-135	69-104-151	83-117-166	97-127-179	110-135-191	124-151-214	135-166-234	146-179-253
				22.5°	30-48-91	43-65-105	54-81-117	65-91-128	75-98-139	86-105-148	96-117-166	105-128-182	113-139-196
				45°	17-28-53	25-37-61	31-47-68	37-53-75	44-57-81	50-61-86	56-68-96	61-75-105	66-81-114
44 x 44	13.44	12.99	CFM		3897	5196	6495	7794	9093	10392	12990	15588	18186
			NC		-	16	23	28	33	37	43	49	53
			Throw (ft.)	0°	38-61-115	54-82-133	68-102-148	82-115-162	95-124-175	108-133-187	121-148-210	133-162-230	143-175-248
				22.5°	29-47-89	42-63-103	53-79-115	63-89-126	74-96-136	84-103-145	94-115-162	103-126-178	111-136-192
				45°	17-28-52	24-37-60	31-46-67	37-52-73	43-56-79	49-60-84	54-67-94	60-73-103	64-79-112
46 x 46	14.69	14.22	CFM		4266	5688	7110	8532	9954	11376	14220	17064	19908
			NC		-	16	23	29	33	37	44	49	54
			Throw (ft.)	0°	39-64-120	57-85-139	71-107-155	85-120-170	100-130-183	113-139-196	127-155-219	139-170-240	150-183-259
				22.5°	31-50-93	44-66-107	55-83-120	66-93-132	77-101-142	88-107-152	98-120-170	107-132-186	116-142-201
				45°	18-29-54	26-38-62	32-48-70	38-54-76	45-58-83	51-62-88	57-70-99	62-76-108	67-83-117
48 x 46	15.33	14.85	CFM		4455	5940	7425	8910	10395	11880	14850	17820	20790
			NC		-	17	23	29	33	37	44	49	54
			Throw (ft.)	0°	40-65-123	58-87-142	73-109-158	87-123-174	102-133-187	116-142-200	129-158-224	142-174-245	153-187-265
				22.5°	32-52-97	46-69-112	58-86-125	69-97-137	81-105-148	92-112-159	102-125-177	112-137-194	121-148-210
				45°	19-30-56	27-40-65	33-50-73	40-56-80	47-61-86	53-65-92	59-73-103	65-80-113	70-86-122
48 x 48	16.00	15.50	CFM		4650	6200	7750	9300	10850	12400	15500	18600	21700
			NC		-	17	23	29	34	37	44	50	54
			Throw (ft.)	0°	41-67-125	59-89-145	74-111-162	89-125-177	104-135-192	118-145-205	132-162-229	145-177-251	156-192-271
				22.5°	32-52-97	46-69-112	58-86-125	69-97-137	81-105-148	92-112-159	102-125-177	112-137-194	121-148-210
				45°	19-30-56	27-40-65	33-50-73	40-56-80	47-61-86	53-65-92	59-73-103	65-80-113	70-86-122

1. Tests conducted in accordance with ANSI/ASHRAE Standard 70-2006 and performance data includes damper.
2. The values 0°, 22.5°, and 45° are horizontal blade deflection angles. For 20°, use the 0° throw value and the 22.5° total pressure value.
3. Units: Core Velocity - Feet Per Minute (FPM); Total Pressure - in. wc.; Throw - ft. at 150, 100, and 50 fpm terminal velocity.
4. NC is based upon 10 dB room absorption (Re: 10<sup>-12</sup> watts) evaluated at 125 through 4000 Hz octave bands at 0° blade deflection. For 22.5° and 45°, increase stated NC level by 1 and 7 respectively. Dash "-" indicates NC value less than 10.
5. For values without a damper, multiply listed throw value by 0.97, multiply total pressure by 0.88, and reduce NC by 4.