

PERFORMANCE DATA

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250, 250-AA / ADJUSTABLE, 1-, 2-, 3- OR 4-WAY DISCHARGE PATTERN

Core Area Sq. Feet	Nominal Duct Size Inches	Core Velocity	NC-20					NC-30				
			100	200	300	400	500	600	700	800	900	1000
			Velocity Pressure	0.001	0.002	0.006	0.010	0.016	0.022	0.031	0.040	0.051
Total Pressure	0.003	0.014	0.031	0.056	0.090	0.131	0.175	0.225	0.290	0.355		
0.12	6 x 4	cfm	10	25	35	50	60	70	85	95	110	120
		NC				14	20	24	28	32	35	38
		Throw, Feet				5-8-13	7-9-12	8-12-19	9-13-18	10-15-21	12-17-24	13-19-31
						7-10-16	8-11-15	10-13-19	11-16-23	12-18-26	14-21-34	15-23-37
0.16	8 x 4	cfm	15	30	50	65	80	95	110	130	145	160
		NC				15	21	26	30	33	36	39
		Throw, Feet			7-6-9	5-7-12	6-9-14	7-11-17	8-12-20	9-14-22	10-15-21	12-17-24
					4-6-10	5-8-13	6-9-15	8-12-19	9-14-22	10-14-20	11-16-23	12-18-26
					5-7-11	6-9-14	7-11-17	9-13-21	10-14-20	11-16-23	12-18-26	14-21-33
					5-8-13	7-11-17	9-13-21	10-15-21	12-17-25	13-20-32	15-22-36	17-25-40
0.20	10 x 4 6 x 6	cfm	20	40	60	80	100	120	140	160	180	200
		NC				16	22	27	31	34	37	40
		Throw, Feet			4-6-9	5-8-13	6-9-15	8-11-18	9-13-21	10-14-20	11-16-23	12-17-25
					4-6-10	6-9-14	7-10-16	8-12-20	10-13-19	11-15-22	12-17-25	13-20-32
					5-7-11	6-9-15	8-11-18	9-14-22	10-15-21	12-17-25	13-20-32	15-22-35
					6-9-14	8-11-18	9-14-22	11-15-22	12-18-26	14-21-34	16-24-38	18-26-42
0.26	12 x 4 8 x 6	cfm	25	50	80	105	130	155	180	210	235	260
		NC			10	17	23	28	32	35	38	41
		Throw, Feet		3-4-7	4-5-6	6-9-14	7-10-16	8-12-20	10-13-19	11-15-22	12-17-25	13-20-32
				3-4-7	5-6-7	6-9-15	8-11-18	9-13-21	10-14-20	11-16-23	13-19-31	14-21-34
				3-5-8	5-6-8	7-9-12	8-12-20	10-14-20	11-16-23	13-19-31	14-21-34	16-24-38
				4-5-6	6-8-11	8-11-15	10-14-20	12-17-24	13-20-32	15-23-37	17-26-41	19-28-45
0.30	14 x 4	cfm	30	60	90	120	150	180	210	240	270	300
		NC			10	18	23	28	32	36	39	42
		Throw, Feet		3-4-7	4-5-6	6-8-10	7-10-13	9-12-17	10-14-20	11-16-23	12-18-26	14-21-33
				3-5-8	5-6-7	6-9-15	8-11-15	9-13-18	10-15-21	12-17-25	13-20-32	15-22-35
				3-5-8	5-7-9	7-10-13	9-12-17	10-14-20	12-17-24	13-20-32	16-24-38	17-26-41
				4-5-6	6-8-11	8-11-16	10-15-21	12-17-25	14-21-34	16-24-38	18-27-43	20-29-47
0.35	16 x 4 10 x 6 8 x 8	cfm	35	70	105	140	175	210	245	280	315	350
		NC			11	18	24	29	33	37	39	42
		Throw, Feet		3-4-7	5-7-11	6-9-15	8-11-18	9-13-21	10-15-21	12-17-24	13-19-31	14-21-34
				3-5-8	5-7-12	6-9-15	8-12-19	10-13-19	11-15-22	14-19-30	14-21-33	15-23-37
				4-6-9	5-8-13	7-10-13	9-13-21	10-15-21	12-17-25	14-21-33	15-23-37	17-26-41
				4-5-6	7-9-12	9-12-17	10-15-21	12-18-26	15-22-35	17-25-40	18-27-44	20-31-49
0.40	18 x 4 12 x 6	cfm	40	80	120	160	200	240	280	320	360	400
		NC			12	19	25	30	34	37	40	43
		Throw, Feet		3-5-8	5-6-7	6-8-11	8-11-15	9-13-18	11-15-22	12-17-25	13-20-32	15-22-35
				3-5-8	5-6-8	7-9-12	8-11-16	10-14-20	11-16-20	13-19-31	15-22-35	16-24-38
				4-6-9	6-8-10	8-10-14	9-13-18	11-15-22	12-18-26	14-21-34	16-24-38	18-26-42
				5-6-7	7-9-12	9-13-18	11-15-22	13-19-31	15-22-36	17-26-41	19-29-46	21-32-51
0.45	20 x 4 14 x 6 10 x 8	cfm	45	90	135	180	225	270	315	360	405	450
		NC			12	19	26	30	34	38	41	44
		Throw, Feet		3-5-8	5-6-8	6-9-15	8-12-19	10-13-19	11-15-22	12-18-26	14-21-33	15-23-37
				3-5-8	5-7-9	7-11-17	9-13-21	10-14-20	12-17-24	13-20-32	15-22-36	16-24-39
				4-6-9	6-8-10	8-12-19	10-13-19	11-16-23	13-19-31	15-22-35	16-24-39	18-27-44
				5-7-11	7-11-17	9-14-22	11-16-23	13-20-32	15-23-37	18-26-42	20-29-47	22-33-53
0.55	24 x 4 16 x 6 12 x 8	cfm	55	110	165	220	275	330	385	440	495	550
		NC			13	20	26	31	35	39	41	44
		Throw, Feet		2-3-4	3-5-8	5-7-12	7-10-16	8-12-20	10-14-20	12-17-24	13-19-31	15-22-35
				2-3-5	4-6-9	5-8-13	8-11-18	9-14-22	11-15-22	12-18-26	14-21-33	16-24-38
				2-3-5	4-6-10	6-9-15	8-12-20	10-14-20	12-17-25	14-21-33	15-23-37	17-26-41
				2-4-6	5-7-12	8-11-18	10-13-19	12-17-25	14-21-34	16-24-39	18-27-44	21-31-50
0.62	18 x 6 10 x 10	cfm	60	125	185	250	310	370	435	495	560	620
		NC			13	21	27	32	36	39	42	45
		Throw, Feet		2-3-4	4-6-9	5-8-13	7-11-17	9-13-21	10-15-21	12-17-24	13-20-32	15-22-36
				2-3-5	4-6-9	6-9-14	8-11-18	9-14-22	11-16-23	13-19-31	14-21-34	16-24-39
				2-3-5	4-6-10	6-9-15	8-12-20	10-16-25	12-17-25	14-21-34	16-24-38	18-27-43
				2-3-6	5-7-12	8-11-18	10-14-20	12-19-30	15-22-35	17-26-41	19-29-46	24-36-57

NC-40



PERFORMANCE DATA

250, 250-AA / ADJUSTABLE, 1-, 2-, 3- OR 4-WAY DISCHARGE PATTERN

Core Area Sq. Feet	Nominal Duct Size Inches	Core Velocity	NC-20					NC-30			NC-40			
			100	200	300	400	500	600	700	800	900	1000		
			0.001	0.002	0.006	0.010	0.016	0.022	0.031	0.040	0.051	0.062		
Total Pressure			0.003	0.014	0.031	0.056	0.090	0.131	0.175	0.225	0.290	0.355		
cfm			70	140	210	280	350	420	490	560	630	700		
NC					14	21	27	32	36	40	42	45		
0.70	30 x 4 20 x 6 14 x 8 12 x 10	Throw, Feet	4-Way	2-3-5	4-6-9	5-8-13	7-11-17	9-13-21	10-15-21	12-17-25	14-21-33	15-23-37	17-26-41	
			3-Way	2-3-5	4-6-9	6-9-14	8-12-19	10-13-19	11-16-23	13-20-32	15-22-36	17-25-40	18-27-44	
			2-Way	2-4-6	5-7-11	7-10-16	9-13-21	10-15-21	12-18-26	15-22-35	17-25-40	18-27-44	20-31-49	
			1-Way	3-4-7	5-8-13	8-12-19	10-15-21	12-19-30	15-22-36	18-26-42	20-29-47	22-33-53	25-37-59	
			NC											
			NC											
0.81	36 x 4 24 x 6 16 x 8 14 x 10	Throw, Feet	4-Way	2-3-5	4-6-9	6-9-14	8-11-18	9-14-22	11-15-22	12-18-26	14-21-34	16-24-38	18-27-43	
			3-Way	2-3-5	4-6-10	6-9-15	8-12-20	11-15-22	12-17-24	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	11-15-22	13-19-31	15-22-36	17-26-41	19-29-46	21-32-51	
			1-Way	3-4-7	5-8-13	8-12-20	11-15-22	13-20-32	16-24-38	18-27-44	20-31-49	23-34-55	26-39-62	
			NC											
			NC											
0.87	18 x 8 12 x 12	Throw, Feet	4-Way	2-3-5	4-6-9	6-9-14	8-12-19	10-13-19	11-16-23	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	10-15-21	12-17-25	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	11-16-23	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	11-15-22	13-20-32	16-24-39	19-28-45	21-31-50	23-35-56	26-39-63	
			NC											
			NC											
1.02	30 x 6 20 x 8 16 x 10 14 x 12	Throw, Feet	4-Way	2-3-5	4-6-10	6-9-15	8-12-19	10-14-20	12-17-24	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	12-18-26	15-22-35	16-24-39	18-27-44	20-30-48	
			2-Way	2-4-6	5-7-12	7-11-17	10-13-19	12-17-24	14-21-33	16-24-39	18-27-43	20-31-49	23-34-55	
			1-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	27-41-65	
			NC											
			NC											
1.15	24 x 8 18 x 10 16 x 12	Throw, Feet	4-Way	2-3-5	4-6-10	6-9-15	8-12-20	10-15-21	12-17-25	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	11-15-22	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	10-13-19	12-17-25	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	12-17-24	15-22-35	17-26-41	20-29-47	22-34-54	25-37-60	28-42-68	
			NC											
			NC											
1.25	36 x 6 20 x 10 14 x 14	Throw, Feet	4-Way	2-3-5	4-5-6	6-8-11	8-12-20	10-15-21	12-17-25	14-21-34	16-24-38	18-27-43	20-29-47	
			3-Way	2-4-6	5-6-7	7-9-12	9-14-22	11-16-23	13-20-32	15-23-37	17-26-41	19-29-46	21-32-51	
			2-Way	2-4-6	5-6-8	8-10-14	10-14-20	12-18-26	15-22-35	17-26-41	19-29-46	21-32-51	24-36-57	
			1-Way	3-5-8	6-8-11	9-13-18	12-17-25	15-22-35	18-26-42	20-30-48	23-34-55	26-39-62	29-43-69	
			NC											
			NC											
1.35	16 x 14 18 x 12	Throw, Feet	4-Way	2-4-6	4-5-6	7-10-16	9-13-21	10-15-21	12-18-26	15-22-35	16-24-39	18-27-43	20-30-48	
			3-Way	2-4-6	5-6-7	7-11-17	9-14-22	11-16-23	13-20-32	15-23-37	18-26-42	20-29-47	22-32-52	
			2-Way	3-4-7	5-7-9	8-12-19	10-15-21	12-18-26	15-22-36	18-26-42	20-29-47	22-33-53	25-37-59	
			1-Way	3-5-8	6-8-11	10-13-19	12-17-25	15-22-36	18-27-43	21-31-50	23-35-56	26-39-63	29-44-70	
			NC											
			NC											
1.53	30 x 8 24 x 10 20 x 12 18 x 14 16 x 16	Throw, Feet	4-Way	2-4-6	5-6-7	7-10-16	9-13-21	11-15-22	13-19-31	15-22-36	17-25-40	19-28-45	21-31-50	
			3-Way	2-4-6	5-6-8	7-11-17	10-13-19	12-17-24	14-21-33	16-24-39	18-27-44	20-31-49	22-34-54	
			2-Way	3-4-7	5-7-9	8-12-19	10-15-21	13-20-32	15-23-37	18-27-43	20-30-48	23-34-55	25-37-60	
			1-Way	3-5-8	7-9-12	10-13-19	12-18-26	15-23-37	18-27-44	21-32-51	24-36-58	27-41-65	30-46-73	
			NC											
			NC											
1.82	36 x 8 30 x 10 24 x 12 20 x 14 18 x 16	Throw, Feet	4-Way	2-4-6	5-6-7	7-11-17	9-14-22	11-16-23	13-20-32	15-23-37	18-26-42	20-29-47	22-33-53	
			3-Way	2-4-6	5-6-8	8-11-18	10-14-20	12-17-25	15-22-35	17-25-40	19-28-45	21-32-51	24-36-57	
			2-Way	3-4-7	6-8-10	8-12-20	11-16-23	14-21-33	16-24-39	19-28-45	21-31-50	24-36-57	26-39-63	
			1-Way	3-5-8	7-9-12	10-14-20	13-20-32	16-24-39	19-29-46	22-34-54	25-37-60	29-42-68	32-48-76	
			NC											
			NC											
2.10	24 x 14 20 x 16 18 x 18	Throw, Feet	4-Way	2-4-6	5-6-8	8-11-18	10-13-19	12-17-24	14-21-34	16-24-39	18-27-44	20-31-49	23-34-55	
			3-Way	3-4-7	5-7-9	8-12-19	10-15-21	12-18-26	15-22-36	18-26-42	20-29-47	22-33-53	25-37-59	
			2-Way	3-4-7	6-8-10	9-13-21	12-17-24	14-21-34	17-25-40	19-29-46	22-32-52	25-37-59	28-41-66	
			1-Way	4-6-9	7-10-13	10-15-21	14-21-33	17-25-40	20-30-48	23-34-55	26-39-62	29-44-70	33-50-80	
			NC											
			NC											



250, 250-AA / ADJUSTABLE, 1-, 2-, 3- OR 4-WAY DISCHARGE PATTERN

Core Area Sq. Feet	Nominal Duct Size Inches	Core Velocity	NC-20				NC-30			NC-40			
			100	200	300	400	500	600	700	800	900	1000	
			Velocity Pressure	0.001	0.002	0.006	0.010	0.016	0.022	0.031	0.040	0.051	0.062
Total Pressure			0.003	0.014	0.031	0.056	0.090	0.131	0.175	0.225	0.290	0.355	
2.35	36 x 10 30 x 12 24 x 16 20 x 18	cfm	235	470	705	940	1180	1410	1640	1880	2120	2350	
		NC			19	27	33	37	41	45	48	51	
		Throw, Feet	4-Way	2-4-6	5-6-8	8-11-18	10-14-20	12-17-25	15-22-35	17-25-40	19-28-45	21-31-50	24-36-57
			3-Way	3-4-7	5-7-9	8-12-20	10-15-21	13-19-31	15-23-37	18-27-43	20-31-49	23-34-55	25-37-60
			2-Way	3-5-8	6-8-11	9-14-22	12-17-24	15-22-35	18-26-42	20-30-48	22-34-54	25-38-61	28-42-68
			1-Way	4-6-9	7-10-13	11-15-22	14-21-33	18-26-42	20-31-49	24-36-57	27-40-64	30-45-72	34-51-82
2.68	36 x 12 30 x 14 24 x 18 20 x 20	cfm	270	535	805	1070	1340	1610	1880	2140	2410	2680	
		NC			20	27	33	38	42	45	48	51	
		Throw, Feet	4-Way	3-4-7	5-7-9	8-12-19	10-15-21	12-18-26	15-22-36	18-26-42	20-29-47	22-32-52	25-37-59
			3-Way	3-4-7	6-8-10	8-12-20	11-15-22	14-21-33	16-24-39	19-28-45	21-31-50	24-36-57	26-39-63
			2-Way	3-5-8	6-8-11	9-14-22	12-17-25	15-22-36	20-30-48	20-31-49	23-35-56	26-39-62	29-44-70
			1-Way	4-6-9	8-10-14	11-16-23	15-22-35	18-27-43	21-32-51	25-37-59	28-41-66	31-47-75	35-53-85
3.15	36 x 14 30 x 16 24 x 20	cfm	315	630	945	1260	1580	1890	2200	2520	2840	3150	
		NC			20	28	34	39	43	46	49	52	
		Throw, Feet	4-Way	3-4-7	5-7-9	8-12-19	11-15-22	13-19-31	15-23-37	18-27-43	20-31-49	23-34-55	26-39-62
			3-Way	3-4-7	6-8-10	9-13-21	11-16-23	14-21-34	17-25-40	19-29-46	22-32-52	25-37-59	28-41-66
			2-Way	3-5-8	7-9-12	10-14-20	12-18-26	16-24-38	19-28-45	21-32-51	24-36-58	27-41-65	30-46-73
			1-Way	4-5-6	8-11-15	12-17-24	15-22-36	19-28-45	22-33-53	26-39-62	29-43-69	33-49-79	37-56-89
3.65	36 x 16 30 x 18 24 x 24	cfm	365	730	1100	1460	1820	2190	2560	2920	3280	3650	
		NC			11	21	29	35	39	43	47	50	
		Throw, Feet	4-Way	3-4-7	6-9-14	8-12-20	11-16-23	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	12-17-24	15-22-35	18-26-42	20-30-48	23-34-55	25-38-61	28-42-68
			2-Way	3-5-8	7-9-12	10-14-20	13-20-32	16-24-39	19-29-46	22-34-54	25-37-60	28-42-68	32-48-76
			1-Way	4-5-6	8-11-16	12-17-25	15-23-37	19-29-46	23-34-55	27-40-64	30-45-72	34-51-82	38-57-92
4.05	36 x 18 30 x 20	cfm	405	810	1220	1620	2020	2430	2830	3240	3640	4050	
		NC			11	22	29	35	40	44	47	50	
		Throw, Feet	4-Way	3-4-7	6-9-14	9-13-21	11-16-23	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	12-17-25	15-22-36	18-27-43	20-31-49	23-35-56	26-39-63	29-44-70
			2-Way	4-6-9	7-10-13	10-15-21	13-20-32	17-25-40	20-29-47	23-34-55	26-39-62	29-44-70	33-49-79
			1-Way	4-5-6	8-11-16	12-18-26	16-24-39	20-29-47	24-36-57	28-41-66	31-46-74	35-52-84	39-59-94
4.72	36 x 20 30 x 24	cfm	470	945	1420	1890	2360	2830	3300	3780	4250	4720	
		NC			12	22	30	36	40	44	48	51	
		Throw, Feet	4-Way	3-5-8	6-9-15	9-14-22	12-17-24	15-22-35	18-26-42	20-30-48	22-34-54	25-38-61	28-42-68
			3-Way	3-5-8	7-9-12	10-13-19	12-18-26	16-24-38	19-28-45	22-32-52	24-36-58	28-41-66	31-46-74
			2-Way	4-6-9	7-10-13	11-15-22	14-21-34	18-26-42	20-31-49	24-36-57	27-40-64	30-46-73	34-51-82
			1-Way	5-6-7	9-12-17	13-19-31	17-25-40	20-31-49	25-37-59	28-42-68	32-49-78	37-55-88	41-61-98
5.82	36 x 24 30 x 30	cfm	580	1160	1750	2330	2910	3490	4070	4660	5240	5820	
		NC			13	23	31	37	41	45	49	52	
		Throw, Feet	4-Way	3-5-8	6-9-15	10-13-19	12-18-26	15-23-37	18-27-44	21-32-51	24-36-57	27-40-64	30-45-72
			3-Way	4-6-9	7-9-12	10-15-21	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	8-10-14	11-16-23	15-22-35	18-27-44	22-32-52	25-37-60	28-42-68	32-48-77	36-54-87
			1-Way	5-6-7	9-13-18	13-20-32	18-26-42	22-32-52	26-39-62	30-45-72	34-51-82	39-58-93	44-66-105
7.17	36 x 30	cfm	715	1430	2150	2870	3580	4300	5020	5740	6450	7170	
		NC			14	24	31	37	42	46	50	53	
		Throw, Feet	4-Way	3-5-8	7-9-12	10-14-20	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	7-10-13	11-15-22	14-21-34	18-26-42	21-31-50	24-36-57	27-41-65	30-46-73	34-51-82
			2-Way	4-5-6	8-11-16	12-17-25	15-23-37	19-29-46	23-34-55	27-40-64	30-45-72	34-51-82	38-57-92
			1-Way	5-6-8	10-13-19	14-21-34	18-27-44	23-34-55	28-41-66	32-48-77	36-54-87	41-61-98	46-69-110
8.63	36 x 36	cfm	865	1730	2590	3450	4320	5180	6040	6900	7700	8630	
		NC			14	25	32	38	43	47	51	53	
		Throw, Feet	4-Way	4-6-9	7-10-13	10-15-21	14-21-33	17-26-41	20-31-49	23-35-56	27-40-64	30-44-71	33-50-80
			3-Way	4-5-6	8-10-14	11-16-23	15-22-35	18-27-44	22-35-52	25-37-60	27-42-68	32-48-77	36-54-87
			2-Way	4-5-6	8-11-16	12-18-26	16-24-39	20-30-48	24-36-58	28-42-67	32-48-76	36-54-86	40-60-96
			1-Way	5-7-9	10-14-20	15-22-36	19-29-46	24-36-58	29-44-70	33-50-80	38-57-91	43-64-103	48-72-116

NC-50

- All pressures are in inches of water
- Throw values given are for terminal velocities of 150, 100 and 50 fpm along a surface. The throw may be increased or decreased as much as 20% by changing the louver setting.
- NC values based on a room absorption of 10 dB, re 10⁻¹² watts
- Blank areas denote NC values less than 10 and cfm values less than 50
- Black dividing lines denote ranges of NC values
- Performance data is based on an approximate 1/8" opening between the border and the adjacent louver, with progressively wider spacings between louvers further away from the border. This setting discharges air parallel to the diffusers face (horizontal discharge, if installed in a ceiling).
- See the section, Engineering Guidelines for additional throw information
- If all the louvers are adjusted to the full open position, the listed NC values will be reduced by 7, the total pressure will be 0.30 times those shown in the tables and the throw will be a vertical free jet
- Data obtained from tests conducted in accordance with ANSI/ASHRAE Standard 70-2006. Actual performance, with flexible duct inlet, may vary in the field. See the section, Engineering Guidelines additional information.