



# ENGINEERING DATA

DVD-1S Series																								
SIZE	Core Patterns	Velocity		300			400			500			600			700			800			900		
		Duct Pt		0.024			0.044			0.065			0.096			0.132			0.17			0.216		
6x6	1S	Eff. Area .140 ft <sup>2</sup>	CFM	75			100			125			150			175			200			225		
			NC	<20			<20			<20			20			20-25			25-30			30-35		
			Throw	12.5	14	15.5	14.5	16	18	16	18	20	17	20	23	18	21	24	18	23	28	19	24	29
8x8	1S	Eff. Area .198 ft <sup>2</sup>	CFM	127			169			212			254			296			338			380		
			NC	<20			<20			<20			20-25			25-30			30-35			35-40		
			Throw	13.5	15	17	16	18	20	18	20	22	19	22	25	20	23	27	20	25	30	21	26	31
10x10	1S	Eff. Area .291 ft <sup>2</sup>	CFM	208			277			347			416			485			554			624		
			NC	<20			<20			<20			20-25			255-30			30-35			35-40		
			Throw	19	21	23	23	25	28	25	28	31	26	31	36	28	33	38	28	35	42	30	37	44
12x12	1S	Eff. Area .422 ft <sup>2</sup>	CFM	300			400			500			600			700			800			900		
			NC	<20			<20			20-25			25-30			30-35			35			35-40		
			Throw	21	23	25	23	26	29	27	30	34	28	32	37	27	34	39	30	37	44	31	39	47
14x14	1S	Eff. Area .529 ft <sup>2</sup>	CFM	406			544			679			813			948			1088			1218		
			NC	<20			<20			20-25			25-30			30-35			30-35			40-45		
			Throw	21	23	25	24	27	30	28	31	34	28	33	38	31	36	41	30	38	46	32	41	49
16x16	1S	.548 ft <sup>2</sup>	CFM	532			713			889			1066			1243			1425			1596		
			NC	<20			<20			20-25			25-30			30-35			35-40			40-45		
			Throw	26	29	32	30	33	36	33	37	41	35	41	47	37	44	51	37	46	55	40	50	60
18x18	1S	Eff. Area .910 ft <sup>2</sup>	CFM	675			900			1125			1350			1575			1800			2025		
			NC	<20			<20			25			25-30			35			35-40			40-45		
			Throw	25	28	31	30	32	35	33	37	41	33	39	45	36	42	49	36	45	54	38	48	58
20x20	1S	Eff. Area 1.12 ft <sup>2</sup>	CFM	834			1115			1392			1670			1947			2230			2503		
			NC	<20			20			25-30			30-35			35-40			40-45			45		
			Throw	30	33	36	35	39	43	40	44	48	41	48	55	44	52	60	44	55	66	46	58	70
24x24	1S	Eff. Area 1.61 ft <sup>2</sup>	CFM	1200			1600			2000			2400			2800			3200			3600		
			NC	<20			20-25			25-30			30-35			35-40			40-45			45-50		
			Throw	32	35	39	36	40	44	41	46	51	42	49	56	45	53	61	45	56	67	48	60	72



# ENGINEERING DATA

DVD-1RV & 1RH Series																					
SIZE	Core Patterns	Velocity		300	400	500	600	700	800	900											
		Duct Pt		0.024	0.044	0.065	0.096	0.132	0.17	0.216											
10x6	1RV 1RH	Eff. Area .168 ft <sup>2</sup>	CFM	123	165	206	248	288	330	371											
			NC	<20	<20	<20	20-25	25-30	30-35	35											
			Throw	17	19	21	20	22	24	23	25	28	24	28	32	25	29	33	25	31	37
12x6	1RV 1RH	Eff. Area .205 ft <sup>2</sup>	CFM	150	200	250	300	350	400	450											
			NC	<20	<20	<20	20-25	25-30	30-35	35-40											
			Throw	15	17	19	18	20	22	21	23	25	21	25	29	22	26	30	22	28	33
14x6	1RV 1RH	Eff. Area .245 ft <sup>2</sup>	CFM	177	235	293	353	412	470	529											
			NC	<20	<20	<20	25	25-30	30-35	35-40											
			Throw	16	18	20	19	21	23	22	24	26	22	26	30	24	28	32	23	29	35
14x8	1RV 1RH	Eff. Area .315 ft <sup>2</sup>	CFM	225	300	375	450	525	600	675											
			NC	<20	<20	20	25-30	30	30-35	35-40											
			Throw	19	21	23	22	24	26	24	27	30	26	30	35	27	32	37	27	34	41
14x10	1RV 1RH	Eff. Area .382 ft <sup>2</sup>	CFM	296	395	494	593	691	790	889											
			NC	<20	<20	20-25	25-30	30-35	35-40	40-45											
			Throw	17	19	21	20	22	24	23	25	28	23	27	31	25	29	33	26	32	38
18x12	1RV 1RH	Eff. Area .596 ft <sup>2</sup>	CFM	450	600	750	900	1050	1200	1350											
			NC	<20	<20	20-25	30	30-35	35-40	40-45											
			Throw	22	24	26	25	28	31	29	32	35	29	34	39	32	37	43	32	40	48
20x12	1RV 1RH	Eff. Area .662 ft <sup>2</sup>	CFM	499	665	831	998	1164	1330	1496											
			NC	<20	<20	20-25	30	30-35	35-40	40-45											
			Throw	23	25	28	26	29	32	29	32	35	30	35	40	32	38	44	32	40	48
24x12	1RV 1RH	Eff. Area .803 ft <sup>2</sup>	CFM	600	800	1000	1200	1400	1600	1800											
			NC	<20	<20	25	30-35	35	35-40	40-45											
			Throw	25	28	31	29	32	35	33	37	41	33	39	45	36	42	48	36	45	54
18x14	1RV 1RH	Eff. Area .694 ft <sup>2</sup>	CFM	525	700	875	1050	1225	1400	1575											
			NC	<20	<20	20-25	30	30-35	35-40	40-45											
			Throw	23	26	29	27	30	33	31	34	37	32	37	43	34	40	46	34	42	50



# ENGINEERING DATA

## DVD-1RV & 1RH Series

SIZE	Core Patterns	Velocity		300	400	500	600	700	800	900
		Duct Pt		0.024	0.044	0.065	0.096	0.132	0.17	0.216
20x14	1RV 1RH	Eff. Area .788 ft <sup>2</sup>	CFM	590	788	983	1181	1379	1575	1773
			NC	<20	<20	25	30-35	35	35-40	40-45
			Throw	23   25   28	26   29   32	30   33   36	30   35   40	32   38   44	33   41   49	34   43   52
24x14	1RH	Eff. Area .945ft <sup>2</sup>	CFM	690	920	1150	1380	1610	1840	2070
			NC	<20	<20	25-30	30-35	35-40	40	40-45
			Throw	25   28   31	28   31   34	32   36   40	33   39   45	35   41   47	35   44   53	38   47   56
20x18	1RH	Eff. Area 1.04 ft <sup>2</sup>	CFM	750	1000	1250	1500	1750	2000	2250
			NC	<20	<20	25-30	30-35	35-40	40	40-45
			Throw	27   30   33	31   34   37	31   34   37	35   39   43	38   45   52	38   48   58	41   51   61
24x18	1RV 1RH	Eff. Area 1.21 ft <sup>2</sup>	CFM	900	1200	1500	1800	2100	2400	2700
			NC	<20	20	25-30	30-35	35-40	40-45	45
			Throw	28   31   34	32   36   40	37   41   45	37   44   51	41   48   55	41   51   61	43   54   65



# ENGINEERING DATA

## DVD-2S Series

SIZE	Core Patterns	Velocity		300	400	500	600	700	800	900
		Duct Pt		.024	.044	.065	.096	.132	.170	.216
6x6	2S	Eff. Area .140 ft <sup>2</sup>	Total CFM	75	100	125	150	175	200	225
			CFM x/y	37	50	62	75	88	100	113
			NC	<20	<20	<20	20	20-25	25-30	30-35
			Throw x/y	10   11   12	11.5   13   14.5	13.5   15   17	13.5   16   18	14.5   17   20	14.5   18   22	16   20   24
8x8	2S	Eff. Area .198 ft <sup>2</sup>	Total CFM	127	169	212	254	296	338	380
			CFM x/y	63	84	106	127	148	169	190
			NC	<20	<20	<20	20-25	25-30	30-35	35-40
			Throw x/y	11   12   13	12.5   14   15.5	13.5   15   17	14.5   17   20	15.5   18   21	15   19   23	17   21   25
10x10	2S	Eff. Area .291 ft <sup>2</sup>	Total CFM	208	277	347	416	485	554	624
			CFM x/y	103	138	173	208	242	277	311
			NC	<20	<20	<20	20-25	25-30	30-35	35-40
			Throw x/y	15   17   19	17   19   21	19   21   23	20   24   28	21   25   29	22   27   32	23   29   35
12x12	2S	Eff. Area .422 ft <sup>2</sup>	Total CFM	300	400	500	600	700	800	900
			CFM x/y	150	200	250	300	350	400	450
			NC	<20	<20	20-25	25-30	30-35	35	35-40
			Throw x/y	15   17   19	18   20   22	21   23   25	21   25   29	22   26   30	22   28   34	24   30   36
14x14	2S	Eff. Area .589 ft <sup>2</sup>	Total CFM	406	544	679	813	948	1088	1218
			CFM x/y	204	271	339	407	475	544	609
			NC	<20	<20	20-25	25-30	30-35	35-40	40-45
			Throw x/y	17   19   21	20   22   24	22   24   26	23   27   31	25   29   33	25   31   37	26   32   38
16x16	2S	Eff. Area .548 ft <sup>2</sup>	Total CFM	532	713	889	1066	1243	1425	1596
			CFM x/y	267	356	445	534	622	713	798
			NC	<20	<20	20-25	25-30	30-35	35-40	40-45
			Throw x/y	21   23   25	23   26   29	27   30   33	28   33   38	30   35   40	30   37   44	32   40   48
18x18	2S	Eff. Area .910 ft <sup>2</sup>	Total CFM	675	900	1125	1350	1575	1800	2025
			CFM x/y	337	450	562	675	787	900	1012
			NC	<20	<20	25	30-35	35	35-40	40-45
			Throw x/y	21   23   25	23   26   29	27   30   33	27   32   37	29   34   39	30   37   44	31   39   47
20x20	2S	Eff. Area 1.12 ft <sup>2</sup>	Total CFM	834	1115	1392	1670	1947	2230	2503
			CFM x/y	417	557	696	834	974	1115	1251
			NC	<20	20	25-30	30-35	35-40	40-45	45
			Throw x/y	25   28   31	29   32   35	33   37   41	34   40   46	37   43   50	36   45   54	39   49   59
24x24	2S	Eff. Area 1.61 ft <sup>2</sup>	Total CFM	1200	1600	2000	2400	2800	3200	3600
			CFM x/y	600	800	1000	1200	1400	1600	1800
			NC	<20	20-25	25-30	30-35	35-40	40-45	45-50
			Throw x/y	25   28   31	29   32   35	33   37   41	33   39   45	36   42   48	36   45   54	38   48   58



# ENGINEERING DATA

## DVD-2RV & 2RH Series

SIZE	Core Patterns		Velocity		300	400	500	600	700	800	900
			Duct Pt		.024	.044	.065	.096	.132	.170	.216
10x6	2RH	2RV	Eff. Area .168 ft <sup>2</sup>	Total CFM	123	165	206	248	288	330	371
				CFM x/y	62	83	102	123	144	165	185
				NC	<20	<20	<20	20-25	25-30	30-35	35
				Throw x/y	12.5   14   15.5	15.5   17   19	17   19   21	17   20   23	19   22   25	18   23   28	20   25   30
12x6	2RH	2RV	Eff. Area .205 ft <sup>2</sup>	Total CFM	150	200	250	300	350	400	450
				CFM x/y	75	100	125	150	175	200	225
				NC	<20	<20	<20	20-25	25-30	30-35	35-40
				Throw x/y	12.5   14   15.5	14.5   16   18	16   18   20	17   20   23	18   21   24	18   23   28	19   24   29
14x6	2RH	2RV	Eff. Area .245 ft <sup>2</sup>	Total CFM	177	235	293	353	412	470	529
				CFM x/y	88	118	147	176	206	235	264
				NC	<20	<20	<20	25	25-30	30-35	35-40
				Throw x/y	13.5   15   17	15.5   17   19	18   20   22	18   21   24	20   23   27	19   24   29	21   26   31
14x8	2RH	2RV	Eff. Area .315 ft <sup>2</sup>	Total CFM	225	300	375	450	525	600	675
				CFM x/y	112	150	187	225	262	300	337
				NC	<20	<20	20	25-30	30	30-35	35-40
				Throw x/y	15.5   17   19	18   20   22	21   23   25	21   25   29	22   26   30	22   28   34	24   30   36
14x10	2RH	2RV	Eff. Area .382 ft <sup>2</sup>	Total CFM	296	395	494	593	691	790	889
				CFM x/y	148	198	246	296	345	395	448
				NC	<20	<20	20-25	25-30	30-35	35-40	40-45
				Throw x/y	13.5   15   17	15.5   17   19	18   20   22	18   21   24	20   23   27	20   25   30	21   26   31
18x12	2RH	2RV	Eff. Area .596 ft <sup>2</sup>	Total CFM	450	600	750	900	1050	1200	1350
				CFM x/y	225	300	375	450	525	600	675
				NC	<20	<20	20-25	30	30-35	35-40	40-45
				Throw x/y	19   21   23	22   24   26	24   27   30	26   30   35	27   32   37	27   34   41	29   36   43
20x12	2RH	2RV	Eff. Area .662 ft <sup>2</sup>	Total CFM	499	665	831	998	1164	1330	1496
				CFM x/y	249	333	415	499	581	665	748
				NC	<20	<20	20-25	30	30-35	35-40	40-45
				Throw x/y	18   20   22	21   23   25	23   26   29	25   29   33	26   30   35	26   32   38	27   34   41
24x12	2RH	2RV	Eff. Area .803 ft <sup>2</sup>	Total CFM	600	800	1000	1200	1400	1600	1800
				CFM x/y	300	400	500	600	700	800	900
				NC	<20	<20	25	30-35	35	35-40	40-45
				Throw x/y	21   23   25	23   26   29	27   30   33	27   32   37	29   34   39	30   37   44	31   39   47
18x14	2RH	2RV	Eff. Area .694 ft <sup>2</sup>	Total CFM	525	700	875	1050	1225	1400	1575
				CFM x/y	262	350	437	525	612	700	787
				NC	<20	<20	20-25	30	30-35	35-40	40-45
				Throw x/y	19   21   23	22   24   26	24   27   30	26   30   35	27   32   37	27   34   41	29   36   43
20x14	2RH	2RV	Eff. Area .788 ft <sup>2</sup>	Total CFM	590	788	983	1181	1379	1575	1773
				CFM x/y	294	393	536	590	689	788	887
				NC	<20	<20	25	30-35	35	35-40	40-45
				Throw x/y	19   21   23	21   23   25	24   27   30	25   29   33	26   31   36	26   33   40	28   35   42
24x14	2RH	2RV	Eff. Area .945 ft <sup>2</sup>	Total CFM	690	920	1150	1380	1610	1840	2070
				CFM x/y	345	460	575	690	805	920	1035
				NC	<20	<20	25-30	30-35	35-40	40	40-45
				Throw x/y	20   22   24	23   26   29	26   29   32	26   31   36	29   34   39	30   37   44	31   39   47
20x18	2RH	2RV	Eff. Area 1.04 ft <sup>2</sup>	Total CFM	750	1000	1250	1500	1750	2000	2250
				CFM x/y	375	500	625	750	875	1000	1125
				NC	<20	<20	25-30	30-35	35-40	40	40-45
				Throw x/y	22   24   26	25   28   31	29   32   35	29   34   39	32   37   43	32   40   48	34   42   50
24x18	2RH	2RV	Eff. Area 1.21 ft <sup>2</sup>	Total CFM	900	1200	1500	1800	2100	2400	2700
				CFM x/y	450	600	750	900	1050	1200	1350
				NC	<20	20	25-30	30-35	35-40	40-45	45
				Throw x/y	22   24   26	25   28   31	29   32   35	29   34   39	32   37   43	32   40   48	34   42   50



DVD-2C Corner Series										
SIZE	Core Patterns	Velocity		300	400	500	600	700	800	900
		Duct Pt		.024	.044	.065	.096	.132	.170	.216
10x6	2C	Eff. Area .168 ft <sup>2</sup>	Total CFM	123	165	206	248	288	330	371
			CFM x/y	83/41	110/55	138/68	165/83	193/96	220/110	248/123
			NC	<20	<20	<20	20-25	25-30	30-35	35
			Throw x	14 15 17	16 18 20	18 20 22	19 22 25	20 23 27	20 25 30	21 26 31
			Throw y	10 11 12	12 13 14	14 15 17	15 17 20	15 18 21	15 19 23	16 20 24
12x6	2C	Eff. Area .205 ft <sup>2</sup>	Total CFM	150	200	250	300	350	400	450
			CFM x/y	112/37	150/50	188/62	225/75	263/87	300/100	338/112
			NC	<20	<20	<20	20-25	25-30	30-35	35-40
			Throw x	15 17 19	18 20 22	21 23 25	21 25 29	22 26 30	22 28 34	24 30 36
			Throw y	9 10 11	11 12 13	13 14 15	13 15 17	14 16 18	14 17 20	14 18 22
14x6	2C	Eff. Area .245 ft <sup>2</sup>	Total CFM	177	235	293	353	412	470	529
			CFM x/y	141/35	188/47	235/58	282/71	329/82	376/94	423/105
			NC	<20	<20	<20	25	25-30	30-35	35-40
			Throw x	14 16 18	17 19 21	20 22 24	20 24 28	21 25 29	22 27 32	23 29 35
			Throw y	9 10 11	10 11 12	12 13 14	12 14 16	13 15 17	13 16 19	14 17 20
14x8	2C	Eff. Area .315 ft <sup>2</sup>	Total CFM	225	300	375	450	525	600	675
			CFM x/y	187/37	250/50	313/62	375/75	438/87	500/100	563/112
			NC	<20	<20	20	25-30	30	30-35	35-40
			Throw x	17 19 21	20 22 24	23 25 28	23 27 31	25 29 33	25 31 37	26 33 40
			Throw y	9 10 11	11 12 13	13 14 15	13 15 17	14 16 18	14 17 20	14 18 22
14x10	2C	Eff. Area .382 ft <sup>2</sup>	Total CFM	296	395	494	593	691	790	889
			CFM x/y	178/119	237/158	296/198	356/237	415/277	474/316	533/356
			NC	<20	<20	20-25	25-30	30-35	35-40	40-45
			Throw x	15 17 19	17 19 21	19 21 23	20 24 28	21 25 29	22 27 32	22 28 34
			Throw y	12 13 14	13 14 15	15 17 19	15 17 20	16 19 22	16 20 24	17 21 25
18x12	2C	Eff. Area .596 ft <sup>2</sup>	Total CFM	450	600	750	900	1050	1200	1350
			CFM x/y	300/150	400/200	500/250	600/300	700/350	800/400	900/450
			NC	<20	<20	20-25	30	30-35	35-40	40-45
			Throw x	21 23 25	23 26 29	27 30 33	27 32 37	29 34 39	30 37 44	31 39 47
			Throw y	14 16 18	15 17 19	18 20 22	19 22 25	20 24 28	20 25 30	22 27 32
20x12	2C	Eff. Area .662 ft <sup>2</sup>	Total CFM	499	665	831	998	1164	1330	1496
			CFM x/y	356/143	475/190	594/238	713/285	831/333	950/380	1069/428
			NC	<20	<20	20-25	30	30-35	35-40	40-45
			Throw x	21 23 25	23 26 29	27 30 33	27 32 37	29 34 39	30 37 44	32 40 48
			Throw y	14 15 17	15 17 19	18 20 22	18 21 24	20 23 27	20 25 30	21 26 31
24x12	2C	Eff. Area .803 ft <sup>2</sup>	Total CFM	600	800	1000	1200	1400	1600	1800
			CFM x/y	450/150	600/200	750/250	900/300	1050/350	1200/400	1350/450
			NC	<20	<20	25	30-35	35	35-40	40-45
			Throw x	22 24 26	25 28 31	29 32 35	29 34 39	32 37 43	32 40 48	34 42 50
			Throw y	14 16 18	16 18 20	19 21 23	19 22 25	20 24 28	20 25 30	22 27 32
18x14	2C	Eff. Area .694 ft <sup>2</sup>	Total CFM	525	700	875	1050	1225	1400	1575
			CFM x/y	375/150	500/200	625/250	750/300	875/350	1000/400	1125/450
			NC	<20	<20	20-25	30	30-35	35-40	40-45
			Throw x	22 24 26	25 28 31	29 32 35	29 34 39	32 37 43	32 40 48	34 42 50
			Throw y	14 16 18	16 18 20	19 21 23	19 22 25	20 24 28	20 25 30	22 27 32
20x14	2C	Eff. Area .788 ft <sup>2</sup>	Total CFM	590	788	983	1181	1379	1575	1773
			CFM x/y	380/211	507/281	632/351	780/421	887/491	1013/562	1141/632
			NC	<20	<20	25	30-35	35	35-40	40-45
			Throw x	20 22 24	23 25 28	26 29 32	27 31 36	28 33 38	29 36 43	30 38 46
			Throw y	15 17 20	18 20 22	21 23 25	20 24 28	22 26 30	22 28 34	24 30 36
24x14	2C	Eff. Area .945 ft <sup>2</sup>	Total CFM	690	920	1150	1380	1610	1840	2070
			CFM x/y	475/215	633/287	791/359	949/431	1108/502	1266/574	1424/646
			NC	<20	<20	25-30	30-35	35-40	40	40-45
			Throw x	22 24 26	25 28 31	28 31 34	29 34 39	32 37 43	31 39 47	33 41 49
			Throw y	15 17 20	18 20 22	21 23 25	21 25 29	23 27 31	22 28 34	24 30 36
20x18	2C	Eff. Area 1.04 ft <sup>2</sup>	Total CFM	750	1000	1250	1500	1750	2000	2250
			CFM x/y	516/234	688/312	860/390	1032/468	1204/546	1376/624	1548/702
			NC	<20	<20	25-30	30-35	35-40	40	40-45
			Throw x	23 26 29	27 30 33	29 34 39	32 37 43	34 40 46	34 42 50	36 45 54
			Throw y	17 19 21	20 22 24	23 25 28	23 27 31	25 29 33	25 31 37	26 33 40
24x18	2C	Eff. Area 1.21 ft <sup>2</sup>	Total CFM	900	1200	1500	1800	2100	2400	2700
			CFM x/y	562/338	750/450	938/562	1125/675	1313/787	1500/900	1688/1012
			NC	<20	20	25-30	30-35	35-40	40-45	45
			Throw x	23 26 29	27 30 33	31 34 37	32 37 43	34 40 46	34 42 50	36 45 54
			Throw y	19 21 23	22 24 26	24 27 30	26 30 35	27 32 37	27 34 41	29 36 43



# ENGINEERING DATA

DVD-3S Square Series																
SIZE	Core Patterns	Velocity		300	400	500	600	700	800	900						
		Duct Pt		.024	.044	.065	.096	.132	.170	.216						
6x6	3S	Eff. Area .140 ft <sup>2</sup>	Total CFM	75	100	125	150	175	200	225						
			CFM x/y	19/28	25/38	31/47	37/56	44/66	50/75	56/85						
			NC	<20	<20	<20	20	20-25	25-30	30-35						
			Throw x	6   7   8	7   8   9	8   9   10	9   10   12	9   11   13	9   11   13	10   12   14						
			Throw y	9   10   11	10   11   12	12   13   14	12   14   16	13   15   17	13   16   19	14   17   20						
8x8	3S	Eff. Area .198 ft <sup>2</sup>	Total CFM	127	169	212	254	296	338	380						
			CFM x/y	32/47	42/64	53/80	63/95	74/111	84/127	95/143						
			NC	<20	<20	<20	20-25	25-30	30-35	35-40						
			Throw x	6   7   8	7   8   9	8   9   10	9   10   12	9   10   12	9   11   13	10   12   14						
			Throw y	9   10   11	10   11   12	12   13   14	12   14   16	12   14   16	13   16   19	14   17   20						
10x10	3S	Eff. Area .291 ft <sup>2</sup>	Total CFM	208	277	347	416	485	554	624						
			CFM x/y	52/77	69/105	86/130	103/156	121/182	138/208	155/234						
			NC	<20	<20	<20	20-25	25-30	30-35	35-40						
			Throw x	9   10   11	10   11   12	11   12   13	12   14   16	13   15   17	13   16   19	14   17   20						
			Throw y	13   14   15	14   16   18	16   18   20	16   19   22	17   20   23	18   23   28	19   24   29						
12x12	3S	Eff. Area .422 ft <sup>2</sup>	Total CFM	300	400	500	600	700	800	900						
			CFM x/y	75/112	100/150	125/187	150/225	175/262	200/300	225/338						
			NC	<20	<20	20-25	25-30	30-35	35	35-40						
			Throw x	9   10   11	11   12   13	13   14   15	13   15   17	14   16   18	14   17   20	14   18   22						
			Throw y	13   14   15	14   16   18	16   18   20	17   20   23	18   21   24	19   23   28	19   24   29						
14x14	3S	Eff. Area .529 ft <sup>2</sup>	Total CFM	406	544	679	813	948	1088	1218						
			CFM x/y	102/152	136/204	170/254	204/316	238/356	271/421	305/458						
			NC	<20	<20	20-25	25-30	30-35	35-40	40-45						
			Throw x	10   11   12	12   13   14	13   14   15	13   15   17	14   16   18	14   18   22	15   19   23						
			Throw y	14   15   17	16   18   20	20   21   23	20   23   27	20   23   27	20   25   30	22   27   32						
16x16	3S	Eff. Area .548 ft <sup>2</sup>	Total CFM	532	713	889	1066	1243	1425	1596						
			CFM x/y	133/200	178/267	222/333	267/400	311/466	356/534	399/601						
			NC	<20	<20	20-25	25-30	30-35	35-40	40-45						
			Throw x	12   13   14	14   15   17	16   18   20	16   19   22	17   20   23	18   22   26	18   23   28						
			Throw y	17   19   21	20   22   24	23   25   28	24   28   32	25   29   33	25   31   37	26   33   40						
18x18	3S	Eff. Area .910 ft <sup>2</sup>	Total CFM	675	900	1125	1350	1575	1800	2025						
			CFM x/y	168/253	225/338	281/422	337/506	394/590	450/675	506/760						
			NC	<20	<20	25	30-35	35	35-40	40-45						
			Throw x	13   14   15	14   16   18	16   18   20	17   20   23	18   21   24	18   23   28	19   24   29						
			Throw y	17   19   21	20   22   24	23   25   28	23   27   31	25   29   33	25   31   37	27   33   40						
20x20	3S	Eff. Area 1.12 ft <sup>2</sup>	Total CFM	834	1115	1392	1670	1947	2230	2503						
			CFM x/y	209/314	278/419	348/521	419/626	487/730	557/835	626/937						
			NC	<20	20	25-30	30-35	35-40	40-45	45						
			Throw x	15   17   19	17   19   21	21   23   25	20   24   28	22   26   30	22   27   32	23   29   35						
			Throw y	21   23   25	23   26   29	26   29   32	27   32   37	30   35   40	30   37   44	31   39   47						
24x24	3S	Eff. Area 1.61 ft <sup>2</sup>	Total CFM	1200	1600	2000	2400	2800	3200	3600						
			CFM x/y	300/450	400/600	500/750	600/900	700/1050	800/1200	900/1350						
			NC	<20	20-25	25-30	30-35	35-40	40-45	45-50						
			Throw x	15   17   19	18   20   22	21   23   25	21   25   29	22   26   30	22   28   34	24   30   36						
			Throw y	21   23   25	23   26   29	27   30   33	27   32   37	29   34   39	30   37   44	31   39   47						

DVD-3H Horizontal Series												
SIZE	Core Patterns	Velocity		300	400	500	600	700	800	900		
		Duct Pt		.024	.044	.065	.096	.132	.170	.216		
10x6	3H	Eff. Area .168 ft <sup>2</sup>	Total CFM	123	165	206	248	288	330	371		
			CFM x/y	39/46	53/61	54/77	77/92	90/108	103/123	116/139		
			NC	<20	<20	<20	20-25	25-30	30-35	35		
			Throw x	10 11 12	12 13 14	14 15 17	15 17 20	15 18 21	15 19 23	16 20 24		
			Throw y	9 10 11	10 11 12	11 12 13	11 13 15	12 14 16	12 15 18	14 17 20	14 17 20	
12x6	3H	Eff. Area .205 ft <sup>2</sup>	Total CFM	150	200	250	300	350	400	450		
			CFM x/y	75/37	100/50	126/62	150/75	176/87	200/100	226/112		
			NC	<20	<20	<20	20-25	25-30	30-35	35-40		
			Throw x	9 10 11	11 12 13	13 14 15	13 15 17	14 16 18	14 17 20	14 18 22		
			Throw y	9 10 11	11 12 13	13 14 15	13 15 17	14 16 18	14 17 20	14 18 22		
14x6	3H	Eff. Area .245 ft <sup>2</sup>	Total CFM	177	235	293	353	412	470	529		
			CFM x/y	105/35	141/47	177/58	212/71	248/82	282/94	319/105		
			NC	<20	<20	<20	25	25-30	30-35	35-40		
			Throw x	13 14 15	14 16 18	16 18 20	17 20 23	18 21 24	18 23 28	20 25 30		
			Throw y	9 10 11	10 11 12	12 13 14	12 14 16	13 15 17	13 16 19	14 17 20	14 17 20	
14x8	3H	Eff. Area .315 ft <sup>2</sup>	Total CFM	225	300	375	450	525	600	675		
			CFM x/y	150/37	200/50	251/62	300/75	351/87	400/100	451/112		
			NC	<20	<20	20	25-30	30	30-35	35-40		
			Throw x	15 17 19	18 20 22	21 23 25	21 25 29	22 26 30	22 28 34	24 30 36		
			Throw y	9 10 11	11 12 13	13 14 15	13 15 17	14 16 18	14 17 20	14 18 22		
14x10	3H	Eff. Area .382 ft <sup>2</sup>	Total CFM	296	395	494	593	691	790	889		
			CFM x/y	102/92	136/123	170/154	204/185	238/216	272/246	266/277		
			NC	<20	<20	20-25	25-30	30-35	35-40	40-45		
			Throw x	13 14 15	12 13 14	14 15 17	15 17 20	15 17 20	15 19 23	17 21 25		
			Throw y	10 11 12	10 11 12	12 13 14	11 13 15	12 14 16	13 16 19	14 17 20		
18x12	3H	Eff. Area .596 ft <sup>2</sup>	Total CFM	450	600	750	900	1050	1200	1350		
			CFM x/y	141/168	187/225	234/281	281/337	328/394	375/450	422/506		
			NC	<20	<20	20-25	30	30-35	35-40	40-45		
			Throw x	14 16 18	16 18 20	19 21 23	19 22 25	20 24 28	20 25 30	22 27 32		
			Throw y	13 14 15	14 16 18	16 18 20	17 20 23	18 21 23	18 23 28	19 24 29		
20x12	3H	Eff. Area .662 ft <sup>2</sup>	Total CFM	499	665	831	998	1164	1330	1496		
			CFM x/y	141/219	187/291	234/363	280/437	328/508	374/581	421/654		
			NC	<20	<20	20-25	30	30-35	35-40	40-45		
			Throw x	14 15 17	15 17 19	18 20 22	18 21 24	20 23 27	19 24 29	21 26 31		
			Throw y	14 15 17	15 17 19	18 20 22	18 21 24	20 23 27	19 24 29	21 26 31		
24x12	3H	Eff. Area .803 ft <sup>2</sup>	Total CFM	600	800	1000	1200	1400	1600	1800		
			CFM x/y	300/150	400/200	500/250	600/300	700/350	800/400	900/450		
			NC	<20	<20	25	30-35	35	35-40	40-45		
			Throw x	15 17 19	18 20 22	21 23 25	21 25 29	22 26 30	22 28 34	24 30 36		
			Throw y	14 16 18	16 18 20	19 21 23	19 22 25	20 24 28	20 25 30	22 27 32		
18x14	3H	Eff. Area .694 ft <sup>2</sup>	Total CFM	525	700	875	1050	1225	1400	1575		
			CFM x/y	148/230	197/306	246/382	295/460	345/535	394/612	443/688		
			NC	<20	<20	20-25	30	30-35	35-40	40-45		
			Throw x	14 16 18	16 18 20	19 21 23	19 22 25	20 24 28	20 25 30	22 27 32		
			Throw y	14 16 18	16 18 20	19 21 23	19 22 25	20 24 28	20 25 30	22 27 32		





# ENGINEERING DATA

DVD-3H Horizontal Series																								
SIZE	Core Patterns	Velocity		300	400	500	600	700	800	900														
		Duct Pt		.024	.044	.065	.096	.132	.170	.216														
20x14	3H	Eff. Area .788 ft <sup>2</sup>	Total CFM	590			788			983			1181			1379			1575			1773		
			CFM x/y	192/207			256/275			320/344			383/414			448/482			512/551			577/619		
			NC	<20			<20			25			30-35			35			35-40			40-45		
			Throw x	14	15	17	16	18	20	19	21	23	20	23	27	20	23	27	20	25	30	22	27	36
			Throw y	13	14	15	14	16	18	17	19	21	17	20	23	19	22	25	18	23	28	19	24	29
24x14	3H	Eff. Area .945 ft <sup>2</sup>	Total CFM	690			920			1150			1380			1610			1840			2070		
			CFM x/y	207/276			276/368			345/460			414/552			483/644			552/736			621/828		
			NC	<20			<20			25-30			30-35			35-40			40			40-45		
			Throw x	17	19	21	20	22	24	23	25	28	24	28	32	25	29	33	25	31	37	27	33	40
			Throw y	14	16	20	16	18	20	19	21	23	20	23	27	20	24	28	21	26	31	22	28	34
20x18	3H	Eff. Area 1.04 ft <sup>2</sup>	Total CFM	750			1000			1250			1500			1750			2000			2250		
			CFM x/y	225/300			300/400			375/500			450/600			525/700			600/800			675/900		
			NC	<20			<20			25-30			30-35			35-40			40			40-45		
			Throw x	19	21	23	22	24	26	24	27	30	26	30	35	27	32	37	28	34	41	29	36	43
			Throw y	15	17	19	18	20	22	21	23	25	21	25	29	22	26	30	22	28	34	24	30	36
24x18	3H	Eff. Area 1.21 ft <sup>2</sup>	Total CFM	900			1200			1500			1800			2100			2400			2700		
			CFM x/y	300/300			400/400			500/500			600/600			700/700			800/800			900/900		
			NC	<20			20			25-30			30-35			35-40			40-45			45		
			Throw x	21	23	25	23	26	29	27	30	33	27	32	37	29	34	39	30	37	44	31	39	47
			Throw y	15	17	19	18	20	22	21	23	25	21	25	29	22	26	30	22	28	34	24	30	36



# ENGINEERING DATA

DVD-3V Vertical Series																								
SIZE	Core Patterns	Velocity		300	400	500	600	700	800	900														
		Duct Pt		.024	.044	.065	.096	.132	.170	.216														
10x6	3V	Eff. Area .168 ft <sup>2</sup>	Total CFM	123			165			206			248			288			330			371		
			CFM x/y	41/41			55/55			68/68			83/83			96/96			110/110			123/123		
			NC	<20			<20			<20			20-25			25-30			30-35			35		
			Throw x	10	11	12	11.5	13	14.5	13.5	15	17	14.5	17	20	15	18	21	15	19	23	16	20	24
			Throw y	10	11	12	11.5	13	14.5	13.5	15	17	14.5	17	20	15	18	21	15	19	23	16	20	24
12x6	3V	Eff. Area .205 ft <sup>2</sup>	Total CFM	150			200			250			300			350			400			450		
			CFM x/y	56/47			75/62			94/78			113/94			131/109			150/125			169/140		
			NC	<20			<20			<20			20-25			25-30			30-35			35-40		
			Throw x	11.5	13	14.5	13.5	15	17	15	17	19	15	18	20	17	20	23	17	21	25	18	23	28
			Throw y	11	12	13	12.5	14	15.5	14.5	15	18	14.5	17	20	15	18	21	16	20	24	17	21	25
14x6	3V	Eff. Area .245 ft <sup>2</sup>	Total CFM	177			235			293			353			412			470			529		
			CFM x/y	53/62			71/83			88/103			106/123			123/144			141/165			159/185		
			NC	<20			<20			<20			25			25-30			30-35			35-40		
			Throw x	11	12	13	12.5	14	15.5	14.5	15	18	14.5	17	20	16	19	22	16	20	24	18	22	26
			Throw y	11.5	13	14.5	13.5	15	17	15.5	17	19	16	19	22	17	20	23	18	22	26	18	23	28
14x8	3V	Eff. Area .315 ft <sup>2</sup>	Total CFM	225			300			375			450			525			600			675		
			CFM x/y	75/75			100/100			125/125			150/150			175/175			200/200			225/225		
			NC	<20			<20			20			25-30			30			30-35			35-40		
			Throw x	12.5	14	15.5	14.5	16	18	16	18	20	17	20	23	18	21	24	18	23	28	19	24	29
			Throw y	12.5	14	15.5	14.5	16	18	16	18	20	17	20	23	18	21	24	18	23	28	19	24	29
14x10	3V	Eff. Area .382 ft <sup>2</sup>	Total CFM	296			395			494			593			691			790			889		
			CFM x/y	88/103			119/138			148/172			178/207			207/242			237/277			266/310		
			NC	<20			<20			20-25			25-30			30-35			35-40			40-45		
			Throw x	11.5	13	14.5	14.5	16	18	16	18	20	17	20	23	18	21	24	18	22	27	19	24	29
			Throw y	11.5	13	14.5	14.5	16	18	16	18	20	17	20	23	18	21	24	18	22	27	19	24	29
18x12	3V	Eff. Area .596 ft <sup>2</sup>	Total CFM	450			600			750			900			1050			1200			1350		
			CFM x/y	150/150			200/200			250/250			300/300			350/350			400/400			450/450		
			NC	<20			<20			20-25			30			30-35			35-40			40-45		
			Throw x	15.5	17	19	18	20	22	21	23	25	21	25	29	22	26	30	22	28	34	24	30	36
			Throw y	15.5	17	19	18	20	22	21	23	25	21	25	29	22	26	30	22	28	34	24	30	36
20x12	3V	Eff. Area .662 ft <sup>2</sup>	Total CFM	499			665			831			998			1164			1330			1496		
			CFM x/y	178/160			238/214			297/267			356/320			415/374			475/428			534/481		
			NC	<20			<20			20-25			30			30-35			35-40			40-45		
			Throw x	16	18	20	19	21	23	22	24	26	22	26	30	24	28	32	23	29	35	25	31	37
			Throw y	16	18	20	19	21	23	22	24	26	22	26	30	24	28	32	23	29	35	25	31	37
24x12	3V	Eff. Area .803 ft <sup>2</sup>	Total CFM	600			800			1000			1200			1400			1600			1800		
			CFM x/y	187/206			250/275			313/343			375/412			437/480			500/549			562/618		
			NC	<20			<20			25			30-35			35			35-40			40-45		
			Throw x	17	19	21	20	22	24	23	25	28	23	27	31	25	29	33	25	31	37	26	33	40
			Throw y	17	19	21	20	22	24	23	25	28	23	27	31	25	29	33	25	31	37	26	33	40
18x14	3V	Eff. Area .694 ft <sup>2</sup>	Total CFM	525			700			875			1050			1225			1400			1575		
			CFM x/y	187/168			250/225			313/281			375/337			437/394			500/450			562/506		
			NC	<20			<20			20-25			30			30-35			35-40			40-45		
			Throw x	17	19	21	20	22	24	23	25	28	23	27	31	25	29	33	25	31	37	26	33	40
			Throw y	17	19	21	20	22	24	23	25	28	23	27	31	25	29	33	25	31	37	26	33	40
20x14	3V	Eff. Area .788 ft <sup>2</sup>	Total CFM	590			788			983			1181			1379			1575			1773		
			CFM x/y	190/200			253/267			317/334			380/401			443/468			507/534			570/601		
			NC	<20			<20			25			30-35			35			35-40			40-45		
			Throw x	17	19	21	20	22	24	23	25	28	23	27	31	25	29	33	25	31	37	26	33	40
			Throw y	17	19	21	20	22	24	23	25	28	23	27	31	25	29	33	25	31	37	26	33	40



# ENGINEERING DATA

## DVD-3V Vertical Series

SIZE	Core Patterns	Velocity		300	400	500	600	700	800	900														
		Duct Pt		.024	.044	.065	.096	.132	.170	.216														
24x14	3V	Eff. Area .945 ft <sup>2</sup>	Total CFM	690			920			1150			1380			1610			1840			2070		
			CFM x/y	237/226			316/302			396/377			475/453			554/528			633/604			713/679		
			NC	<20			<20			25-30			30-35			35-40			40			40-45		
			Throw x	17	19	21	20	22	24	23	25	28	23	27	31	25	29	33	25	31	37	26	33	40
			Throw y	17	19	21	20	22	24	23	25	28	23	27	31	25	29	33	25	31	37	26	33	40
20x18	3V	Eff. Area 1.04 ft <sup>2</sup>	Total CFM	750			1000			1250			1500			1750			2000			2250		
			CFM x/y	258/246			344/328			430/410			516/492			602/574			688/657			775/738		
			NC	<20			<20			25-30			30-35			35-40			40			40-45		
			Throw x	19	21	23	22	24	26	24	27	30	26	30	35	27	32	37	27	34	40	29	36	43
			Throw y	19	21	23	22	24	26	24	27	30	26	30	35	27	32	37	27	34	40	29	36	43
24x18	3V	Eff. Area 1.21 ft <sup>2</sup>	Total CFM	900			1200			1500			1800			2100			2400			2700		
			CFM x/y	281/309			375/412			469/515			563/618			657/721			750/824			845/927		
			NC	<20			20			25-30			30-35			35-40			40-45			45		
			Throw x	21	23	25	23	26	29	27	30	33	27	32	37	29	34	39	30	37	44	31	39	47
			Throw y	21	23	25	23	26	29	27	30	33	27	32	37	29	34	39	30	37	44	31	39	47



# ENGINEERING DATA

DVD-4S Square Series																								
SIZE	Core Patterns	Velocity		300			400			500			600			700			800			900		
		Duct Pt		.024			.044			.065			.096			.132			.170			.216		
6x6	4S	Eff. Area .140 ft <sup>2</sup>	Total CFM	75			100			125			150			175			200			225		
			CFM x/y	19			25			31			37			44			50			56		
			NC	<20			<20			<20			20			20-25			25-30			30-35		
			Throw x/y	6.5	7	7.5	7	8	9	8	9	10	8.5	10	11.5	9.5	11	12.5	9	11	13	9.5	12	14.5
8x8	4S	Eff. Area .198 ft <sup>2</sup>	Total CFM	127			169			212			254			296			338			380		
			CFM x/y	32			42			53			63			74			84			95		
			NC	<20			<20			<20			20-25			25-30			30-35			35-40		
			Throw x/y	6.5	7	7.5	7	8	9	8	9	10	8.5	10	11.5	9.5	11	12.5	9	11	13	9.5	12	14.5
10x10	4S	Eff. Area .291 ft <sup>2</sup>	Total CFM	208			277			347			416			485			554			624		
			CFM x/y	52			69			86			103			121			138			155		
			NC	<20			<20			<20			20-25			25-30			30-35			35-40		
			Throw x/y	9	10	11	10	11	12	11	12	13	12	14	16	13	15	17	13	16	19	13.5	17	20
12x12	4S	Eff. Area .422 ft <sup>2</sup>	Total CFM	300			400			500			600			700			800			900		
			CFM x/y	75			100			125			150			175			200			225		
			NC	<20			<20			20-25			25-30			30-35			35			35-40		
			Throw x/y	9	10	11	10	11	12	11	12	13	12	14	16	13	15	17	13	16	19	13.5	17	20
14x14	4S	Eff. Area .529 ft <sup>2</sup>	Total CFM	406			544			679			813			948			1088			1218		
			CFM x/y	102			136			170			204			237			271			305		
			NC	<20			<20			20-25			25-30			30-35			35-40			40-45		
			Throw x/y	10	11	12	11.5	13	14.5	12.5	14	15.5	13	15	17	13.5	16	18	14.5	18	22	15	19	23
16x16	4S	Eff. Area .548 ft <sup>2</sup>	Total CFM	532			713			889			1066			1243			1425			1596		
			CFM x/y	133			178			222			267			311			356			399		
			NC	<20			<20			20-25			25-30			30-35			35-40			40-45		
			Throw x/y	11.5	13	14.5	13.5	15	17	16	18	20	16	19	22	17	20	23	18	22	26	18	23	28
18x18	4S	Eff. Area .910 ft <sup>2</sup>	Total CFM	675			900			1125			1350			1575			1800			2025		
			CFM x/y	168			225			281			337			394			450			506		
			NC	<20			<20			25			30-35			35			35-40			40-45		
			Throw x/y	12.5	14	15.5	14.5	16	18	16	18	20	17	20	23	18	21	24	18	23	28	19	24	29
20x20	4S	Eff. Area 1.12 ft <sup>2</sup>	Total CFM	834			1115			1392			1670			1947			2230			2503		
			CFM x/y	209			278			348			419			487			557			626		
			NC	<20			20			25-30			30-35			35-40			40-45			45		
			Throw x/y	15.5	17	19	17	19	21	21	23	25	20	24	28	22	26	30	22	27	32	23	29	35
24x24	4S	Eff. Area 1.61 ft <sup>2</sup>	Total CFM	1200			1600			2000			2400			2800			3200			3600		
			CFM x/y	300			400			500			600			700			800			900		
			NC	<20			20-25			25-30			30-35			35-40			40-45			45-50		
			Throw x/y	15.5	17	19	18	20	22	21	23	25	21	25	29	22	26	30	22	28	34	24	30	36

DVD-4R Series										
SIZE	Core Patterns	Velocity		300	400	500	600	700	800	900
		Duct Pt		.024	.044	.065	.096	.132	.170	.216
10x6	4R	Eff. Area .168 ft <sup>2</sup>	Total CFM	123	165	206	248	288	330	371
			CFM x/y	40/20	55/28	68/34	83/41	96/48	110/55	123/62
			NC	<20	<20	<20	20-25	25-30	30-35	35
			Throw x	10   11   12	12   13   14	14   15   17	15   17   20	15   18   21	15   19   23	16   20   24
			Throw y	7   8   9	8   9   10	9   10   11	9   11   13	10   12   14	10   12   14	14   13   16
12x6	4R	Eff. Area .205 ft <sup>2</sup>	Total CFM	150	200	250	300	350	400	450
			CFM x/y	56/18	75/25	94/31	113/37	131/44	150/50	169/56
			NC	<20	<20	<20	20-25	25-30	30-35	35-40
			Throw x	12   13   14	14   15   17	15   17   19	15   18   21	17   20   23	17   21   25	18   23   28
			Throw y	6   7   8	7   8   9	8   9   10	9   10   12	9   11   13	9   11   13	9   11   13
14x6	4R	Eff. Area .245 ft <sup>2</sup>	Total CFM	177	235	293	353	412	470	529
			CFM x/y	71/17	94/24	118/29	141/35	165/41	188/47	212/53
			NC	<20	<20	<20	25	25-30	30-35	35-40
			Throw x	12   13   14	14   15   17	15   17   19	16   19   22	17   20   23	18   22   26	18   23   28
			Throw y	6   7   8	7   8   9	8   9   10	9   10   12	9   10   12	9   10   12	9   11   13
14x8	4R	Eff. Area .315 ft <sup>2</sup>	Total CFM	225	300	375	450	525	600	675
			CFM x/y	94/18	125/25	156/31	188/37	218/44	250/50	281/56
			NC	<20	<20	20	25-30	30	30-35	35-40
			Throw x	14   16   18	16   18   20	19   21   23	19   22   25	20   24   28	20   25   30	22   27   32
			Throw y	6   7   8	7   8   9	8   9   10	9   10   12	9   11   13	9   11   13	10   12   14
14x10	4R	Eff. Area .382 ft <sup>2</sup>	Total CFM	296	395	494	573	691	790	889
			CFM x/y	88/59	119/79	148/99	178/119	207/138	237/158	266/178
			NC	<20	<20	20-25	25-30	30-35	35-40	40-45
			Throw x	10   11   12	12   13   14	13   14   15	14   16   18	15   17   20	14   18   22	15   19   23
			Throw y	7   8   9	8   9   10	10   11   12	10   12   14	11   13   15	10   13   16	11   14   17
18x12	4R	Eff. Area .596 ft <sup>2</sup>	Total CFM	450	600	750	900	1050	1200	1350
			CFM x/y	150/75	200/100	250/125	300/150	350/175	400/200	450/225
			NC	<20	<20	20-25	30	30-35	35-40	40-45
			Throw x	15   17   19	18   20   22	21   23   25	21   25   29	22   26   30	22   28   34	24   30   36
			Throw y	9   10   11	11   12   13	13   14   15	13   15   17	14   16   18	14   17   20	14   18   22
20x12	4R	Eff. Area .662 ft <sup>2</sup>	Total CFM	499	665	831	998	1164	1330	1496
			CFM x/y	178/71	238/95	296/119	356/143	415/116	475/190	534/214
			NC	<20	<20	20-25	30	30-35	35-40	40-45
			Throw x	9   10   11	19   21   23	22   24   26	22   26   30	24   28   32	23   29   35	25   31   37
			Throw y	9   10   11	10   11   12	12   13   14	12   14   16	13   15   17	13   16   19	14   17   20
24x12	4R	Eff. Area .803 ft <sup>2</sup>	Total CFM	600	800	1000	1200	1400	1600	1800
			CFM x/y	225/75	300/100	375/125	450/150	525/175	600/200	675/225
			NC	<20	<20	25	30-35	35	35-40	40-45
			Throw x	19   21   23	22   24   26	24   27   30	26   30   35	27   32   37	27   34   41	29   36   43
			Throw y	9   10   11	11   12   13	13   14   15	13   15   17	14   16   18	14   17   20	14   18   22
18x14	4R	Eff. Area .694 ft <sup>2</sup>	Total CFM	525	700	875	1050	1225	1400	1575
			CFM x/y	187/75	250/100	312/125	375/150	437/175	500/200	562/225
			NC	<20	<20	20-25	30	30-35	35-40	40-45
			Throw x	17   19   21	20   22   24	23   25   28	23   27   31	25   29   33	25   31   37	26   33   40
			Throw y	9   10   11	11   12   13	13   14   15	13   15   17	14   16   18	14   17   20	14   18   22





# ENGINEERING DATA

DVD-4R Series																								
SIZE	Core Patterns	Velocity		300	400	500	600	700	800	900														
		Duct Pt		.024	.044	.065	.096	.132	.170	.216														
20x14	4R	Eff. Area .788 ft <sup>2</sup>	Total CFM	590		788		983		1181		1379		1575		1773								
			CFM x/y	189/105		253/140		316/176		380/211		444/246		507/281		571/316								
			NC	<20		<20		25		30-35		35		35-40		40-45								
			Throw x	17	19	21	20	22	24	22	24	26	23	27	31	25	29	33	25	31	37	26	32	38
			Throw y	10	11	12	12	13	14	13	14	15	13	15	17	14	16	18	14	18	22	15	19	23
24x14	4R	Eff. Area .945 ft <sup>2</sup>	Total CFM	690		920		1150		1380		1610		1840		2070								
			CFM x/y	237/108		316/144		396/179		475/215		554/251		633/287		712/323								
			NC	<20		<20		25-30		30-35		35-40		40		40-45								
			Throw x	17	19	21	20	22	24	23	25	28	24	28	32	25	29	33	25	31	37	26	33	40
			Throw y	10	11	12	12	13	14	14	15	17	14	16	18	15	17	20	14	18	22	15	19	23
20x18	4R	Eff. Area 1.04 ft <sup>2</sup>	Total CFM	750		1000		1250		1500		1750		2000		2250								
			CFM x/y	258/117		344/156		430/195		516/234		602/273		688/312		774/351								
			NC	<20		<20		25-30		30-35		35-40		40		40-45								
			Throw x	19	21	23	22	24	26	24	27	30	26	30	35	27	32	37	27	34	41	29	36	43
			Throw y	11	12	13	13	14	15	14	16	18	15	17	20	15	18	21	16	20	24	17	21	25
24x18	4R	Eff. Area 1.21 ft <sup>2</sup>	Total CFM	900		1200		1500		1800		2100		2400		2700								
			CFM x/y	281/169		375/225		469/281		563/337		656/394		750/450		844/506								
			NC	<20		20		25-30		30-35		35-40		40-45		45								
			Throw x	21	23	25	23	26	29	27	30	33	27	32	37	29	34	39	30	37	44	31	39	47
			Throw y	13	14	15	14	16	18	16	18	20	17	20	23	18	21	24	18	23	28	19	24	29

# ENGINEERING FOOTNOTES

## **ENGINEERING FOOTNOTES FOR SHOEMAKER DIFFUSERS & GRILLES:**

**SIZE:** Nominal size or the duct opening / neck size.

**EFFECTIVE AREA:** The space between the blades actually utilized by the air.

**VELOCITY:** The actual velocity of the air through the blades measured with a velometer in at least 4 places.

**FILTERVELOCITY:** Some velocities higher than 500 FPM will decrease filter effectiveness and possibly blow off agglomerates.

*Special Note: The 920FG table gives the air flow for different filter grilles at 2 CFM per square inch of filter with allowance for the blockage caused by the grille.*

**DUCT PT:** The total pressure behind the diffuser in the duct forcing that air through the diffuser.

**DUCT PS:** The static pressure in the duct directly behind the grille or neck of the T-Bar grille. The static load on the fan chargeable against that grille. Velometer readings are taken between grille vanes giving actual velocity.

**THROW:** The throws noted in the tables are the distances from the diffuser to where the air stream velocity has dropped to not under 100/75/50 F.P.M.

### **NOISE CRITERIA:**

NC "A" scale.

- (1) Below NC25 extremely quiet.
- (2) Below NC30 Quiet Office.
- (3) Below NC35 Conference Rooms; normal voice 10-30 ft.
- (4) Below NC40 Conference Rooms; 6-12 ft. normal voice.
- (5) NC45 Conference Rooms; 3-6 ft. normal voice.

### **NOISE CRITERIA addition for RD series:**

The NC values are based on a room absorption of 18 db, re 10-13 watts.

### **NOISE CRITERIA addition for OBR – Damper Throttling:**

- ¼ Closed – 5
- ⅓ Closed – 10
- ½ Closed – 15