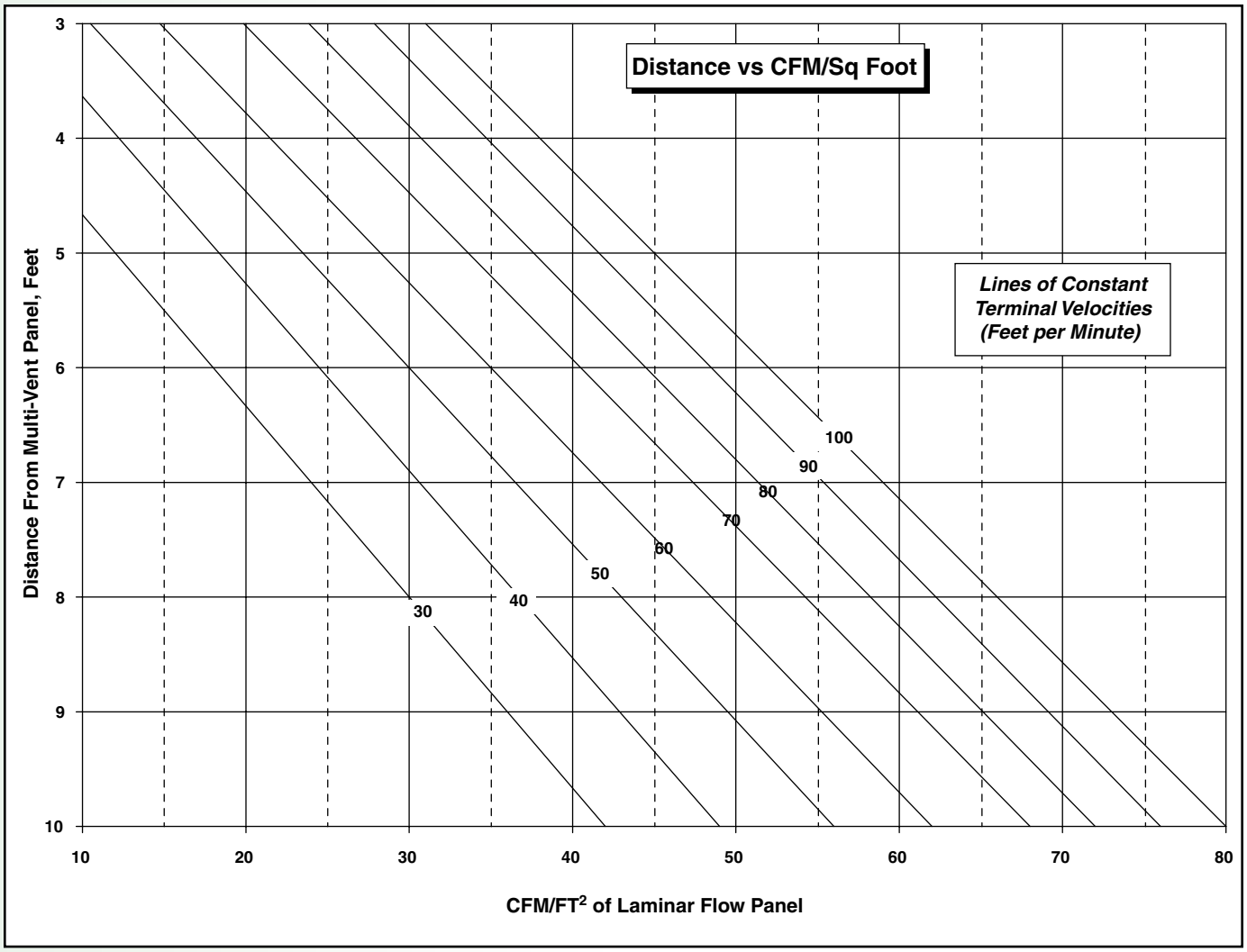
GRAPH 3: PROJECTION DISTANCE VS. CFM/FT² PANEL AREA



Test Standard
- ANSI / ASHRAE standard 70 & 113
- Velocity is the air speed, in feet per minute, measured in the supply air stream.
- Velocity vs. distance is shown based on CFM/square foot of active face area, and is not dependent upon the size of the face.

	PANEL LENGTH	INLET SIZE	CFM / Ft² of Panel Area	15	20	25	30	35	40	45	50	55	60
8" WIDE	24"	5" ø	CFM	20	30	30	40	50	50	60	70	70	80
			Ps	0.01	0.01	0.01	0.02	0.03	0.03	0.04	0.06	0.06	0.08
			NC	<20	<20	<20	<20	<20	<20	<20	20	20	23
	36"	5" ø	CFM	30	40	50	60	70	80	90	100	110	120
			Ps	0.01	0.01	0.01	0.02	0.03	0.04	0.04	0.06	0.07	0.08
			NC	<20	<20	<20	<20	20	23	26	29	31	34
	48"	5" ø	CFM	40	50	70	80	90	110	120	130	150	160
			Ps	0.01	0.01	0.02	0.02	0.03	0.04	0.05	0.05	0.07	0.08
			NC	<20	<20	<20	<20	21	26	29	31	35	36
	60"	5" ø	CFM	50	70	80	100	120	130	150	170	180	200
			Ps	0.01	0.01	0.01	0.02	0.03	0.04	0.05	0.06	0.07	0.09
			NC	<20	<20	<20	24	29	31	35	38	39	42
	72"	5" ø	CFM	60	80	100	120	140	160	180	200	220	240
			Ps	0.01	0.01	0.01	0.02	0.03	0.03	0.04	0.05	0.06	0.08
			NC	<20	<20	24	29	33	36	39	42	44	47

	PANEL LENGTH	INLET SIZE	CFM / Ft² of Panel Area	15	20	25	30	35	40	45	50	55	60
12" WIDE	24"	7" ø	CFM	30	40	50	60	70	80	90	100	110	120
			Ps	0.01	0.01	0.01	0.01	0.02	0.02	0.03	0.03	0.04	0.05
			NC	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20
		8" ø	CFM	30	40	50	60	70	80	90	100	110	120
			Ps	0.01	0.01	0.01	0.01	0.01	0.01	0.02	0.02	0.03	0.03
			NC	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20
	36"	7" ø	CFM	50	60	80	90	110	120	140	150	170	180
			Ps	0.01	0.01	0.01	0.02	0.03	0.03	0.04	0.05	0.06	0.07
			NC	<20	<20	<20	<20	<20	21	25	27	30	31
		8" ø	CFM	50	60	80	90	110	120	140	150	170	180
			Ps	0.01	0.01	0.01	0.01	0.02	0.02	0.03	0.03	0.04	0.04
			NC	<20	<20	<20	<20	<20	<20	<20	21	24	25
	48"	7" ø	CFM	60	80	100	120	140	160	180	200	220	240
			Ps	0.01	0.01	0.01	0.02	0.03	0.03	0.04	0.05	0.06	0.08
			NC	<20	<20	<20	<20	21	24	27	30	32	35
		8" ø	CFM	60	80	100	120	140	160	180	200	220	240
			Ps	0.01	0.01	0.01	0.02	0.03	0.03	0.04	0.05	0.06	0.08
			NC	<20	<20	<20	<20	<20	<20	22	25	28	30
	60"	7" ø	CFM	80	100	130	150	180	200	230	250	280	300
			Ps	0.01	0.01	0.02	0.03	0.04	0.05	0.07	0.08	0.10	0.12
			NC	<20	<20	<20	21	25	28	32	34	37	39
		8" ø	CFM	80	100	130	150	180	200	230	250	280	300
			Ps	0.01	0.01	0.01	0.02	0.02	0.03	0.04	0.05	0.06	0.07
			NC	<20	<20	<20	<20	22	25	29	31	34	36
	72"	7" ø	CFM	90	120	150	180	210	240	270	300	330	360
			Ps	0.01	0.01	0.02	0.02	0.03	0.04	0.06	0.07	0.08	0.10
			NC	<20	<20	21	25	29	33	36	39	41	43
		8" ø	CFM	90	120	150	180	210	240	270	300	330	360
			Ps	0.01	0.01	0.02	0.02	0.03	0.04	0.06	0.07	0.08	0.10
			NC	<20	<20	<20	<20	22	26	29	32	34	36

Test Standard
- ANSI / ASHRAE standard 70
- Data obtained with the volume damper in the full open position

Sound Levels
- NC is noise criteria curve that will not be exceeded at the operating point by the individual diffuser. This is determined by assuming a 10dB (ref: 10^{-12} watts) room attenuation that is subtracted from the power levels in each of the 2nd thru 7th octave bands.

Pressure
- P_S represents Static Pressure, inches of water

	PANEL LENGTH	INLET SIZE	CFM / Ft² of Panel Area	15	20	25	30	35	40	45	50	55	60
24" WIDE	24"	8" ø	CFM	60	80	100	120	140	160	180	200	220	240
			Ps	0.01	0.01	0.01	0.02	0.03	0.03	0.04	0.05	0.06	0.08
			NC	<20	<20	<20	<20	21	24	27	30	32	35
		10" ø	CFM	60	80	100	120	140	160	180	200	220	240
			Ps	0.01	0.01	0.01	0.02	0.03	0.03	0.04	0.05	0.06	0.08
			NC	<20	<20	<20	<20	<20	<20	22	25	28	30
		12" ø	CFM	60	80	100	120	140	160	180	200	220	240
			Ps	0.01	0.01	0.01	0.01	0.01	0.02	0.02	0.03	0.04	0.04
			NC	<20	<20	<20	<20	<20	<20	<20	<20	<20	22
	36"	8" ø	CFM	90	120	150	180	210	240	270	300	330	360
			Ps	0.01	0.02	0.03	0.04	0.06	0.08	0.10	0.12	0.14	0.17
			NC	<20	<20	21	25	29	33	36	39	41	43
		10" ø	CFM	90	120	150	180	210	240	270	300	330	360
			Ps	0.01	0.01	0.02	0.02	0.03	0.04	0.06	0.07	0.08	0.10
			NC	<20	<20	<20	<20	22	26	29	32	34	36
		12" ø	CFM	90	120	150	180	210	240	270	300	330	360
			Ps	0.01	0.01	0.01	0.02	0.02	0.03	0.04	0.05	0.06	0.07
			NC	<20	<20	<20	<20	<20	<20	22	24	27	29
	48"	8" ø	CFM	120	160	200	240	280	320	360	400	440	480
			Ps	0.01	0.02	0.03	0.04	0.06	0.08	0.10	0.12	0.15	0.18
			NC	<20	<20	25	30	34	37	40	43	46	48
		10" ø	CFM	120	160	200	240	280	320	360	400	440	480
			Ps	0.01	0.01	0.02	0.03	0.04	0.06	0.07	0.09	0.11	0.13
			NC	<20	<20	<20	22	26	29	32	35	37	40
		12" ø	CFM	120	160	200	240	280	320	360	400	440	480
			Ps	0.01	0.01	0.02	0.02	0.03	0.04	0.05	0.07	0.08	0.09
			NC	<20	<20	<20	<20	23	26	29	32	34	37
	60"	8" ø	CFM	150	200	250	300	350	400	450	500	550	600
			Ps	0.02	0.03	0.05	0.07	0.09	0.12	0.15	0.19	0.23	0.27
			NC	<20	25	31	36	40	43	46	49	51	54
		10" ø	CFM	150	200	250	300	350	400	450	500	550	600
			Ps	0.01	0.02	0.03	0.05	0.07	0.09	0.11	0.14	0.16	0.20
			NC	<20	<20	23	28	32	35	38	41	43	46
		12" ø	CFM	150	200	250	300	350	400	450	500	550	600
			Ps	0.01	0.02	0.03	0.04	0.05	0.07	0.08	0.10	0.12	0.15
			NC	<20	<20	<20	22	26	29	32	35	37	40
	72"	8" ø	CFM	180	240	300	360	420	480	540	600	660	720
			Ps	0.02	0.03	0.05	0.07	0.10	0.13	0.16	0.20	0.24	0.28
			NC	<20	26	32	36	40	44	47	50	52	54
		10" ø	CFM	180	240	300	360	420	480	540	600	660	720
			Ps	0.01	0.02	0.04	0.05	0.07	0.09	0.12	0.15	0.18	0.21
			NC	<20	<20	24	29	33	37	40	42	45	47
		12" ø	CFM	180	240	300	360	420	480	540	600	660	720
			Ps	0.01	0.02	0.03	0.04	0.05	0.07	0.09	0.11	0.13	0.15
			NC	<20	<20	<20	24	28	32	35	37	40	42

Test Standard
- ANSI / ASHRAE standard 70
- Data obtained with the volume damper in the full open position

Sound Levels
- NC is noise criteria curve that will not be exceeded at the operating point by the individual diffuser. This is determined by assuming a 10dB (ref: 10^{-12} watts) room attenuation that is subtracted from the power levels in each of the 2nd thru 7th octave bands.

Pressure
- P_S represents Static Pressure, inches of water

	PANEL LENGTH	INLET SIZE	CFM / Ft² of Panel Area	15	20	25	30	35	40	45	50	55	60
36" WIDE	36"	10" ø	CFM	140	180	230	270	320	360	410	450	500	540
			Ps	0.01	0.02	0.03	0.04	0.06	0.07	0.09	0.11	0.14	0.16
			NC	<20	<20	25	29	33	36	40	42	45	47
		12" ø	CFM	140	180	230	270	320	360	410	450	500	540
			Ps	0.01	0.01	0.02	0.03	0.04	0.05	0.07	0.08	0.10	0.12
			NC	<20	<20	<20	22	26	29	33	35	38	40
		14" ø	CFM	140	180	230	270	320	360	410	450	500	540
			Ps	0.01	0.01	0.02	0.02	0.03	0.04	0.05	0.06	0.07	0.09
			NC	<20	<20	<20	<20	23	26	30	32	35	37
	48"	10" ø	CFM	180	240	300	360	420	480	540	600	660	720
			Ps	0.02	0.03	0.05	0.07	0.10	0.13	0.16	0.20	0.24	0.28
			NC	<20	22	28	32	36	40	43	46	48	50
		12" ø	CFM	180	240	300	360	420	480	540	600	660	720
			Ps	0.01	0.02	0.04	0.05	0.07	0.09	0.12	0.15	0.18	0.21
			NC	<20	<20	24	29	33	37	40	42	45	47
		14" ø	CFM	180	240	300	360	420	480	540	600	660	720
			Ps	0.01	0.02	0.03	0.04	0.05	0.07	0.09	0.11	0.13	0.15
			NC	<20	<20	<20	24	28	32	35	37	40	42
	60"	10" ø	CFM	230	300	380	450	530	600	680	750	830	900
			Ps	0.02	0.04	0.06	0.08	0.11	0.15	0.19	0.23	0.28	0.33
			NC	21	28	34	38	42	46	49	51	54	56
		12" ø	CFM	230	300	380	450	530	600	680	750	830	900
			Ps	0.02	0.03	0.04	0.06	0.08	0.11	0.14	0.17	0.20	0.24
			NC	<20	22	28	32	36	40	43	45	48	50
		14" ø	CFM	230	300	380	450	530	600	680	750	830	900
			Ps	0.02	0.03	0.04	0.06	0.08	0.11	0.14	0.17	0.20	0.24
			NC	<20	<20	23	27	31	34	38	40	43	45
	72"	10" ø	CFM	270	360	450	540	630	720	810	900	990	1080
			Ps	0.02	0.04	0.06	0.09	0.12	0.15	0.19	0.24	0.29	0.34
			NC	22	29	35	40	44	47	50	53	55	58
		12" ø	CFM	270	360	450	540	630	720	810	900	990	1080
			Ps	0.02	0.04	0.06	0.09	0.12	0.15	0.19	0.24	0.29	0.34
			NC	<20	24	30	35	39	42	45	48	50	53
		14" ø	CFM	270	360	450	540	630	720	810	900	990	1080
			Ps	0.02	0.03	0.05	0.06	0.09	0.12	0.15	0.18	0.22	0.26
			NC	<20	21	27	32	36	39	42	45	47	50

Test Standard
- ANSI / ASHRAE standard 70
- Data obtained with the volume damper in the full open position

Sound Levels
- NC is noise criteria curve that will not be exceeded at the operating point by the individual diffuser. This is determined by assuming a 10dB (ref: 10^{-12} watts) room attenuation that is subtracted from the power levels in each of the 2nd thru 7th octave bands.

Pressure
- P_S represents Static Pressure, inches of water