Hart&Cooley
install confidence

DPD, DPD R6 (Page 94)

Neck Velocity		300	400	500	600	700	800	900	1000	1200	1400	1600
6"	CFM	60	80	100	120	135	155	175	195	235	275	315
An .200	Ps	.004	.006	.010	.014	.018	.023	.030	.037	.054	.073	.096
Ak .279	NC	<20	<20	<20	<20	<20	<20	20	25	30	35	40
	Throw	1.0	1.0	2.0	2.0	2.5	3.0	3.5	4.0	4.5	5.5	6.5
8"	CFM	105	140	175	210	245	280	315	350	420	490	560
An .350	Ps	.010	.010	.015	.022	.029	.038	.049	.060	.086	.117	.150
Ak .354	NC	<20	<20	<20	<20	20	25	30	30	35	40	45
	Throw	2.0	2.5	3.5	4.0	4.5	5.0	5.5	6.0	7.0	8.0	9.0
10"	CFM	165	220	275	325	380	435	490	545	655	765	875
An .540	Ps	.014	.014	.021	.030	.041	.054	.068	.084	.122	.167	.212
Ak .400	NC	<20	<20	<20	<20	20	25	30	35	40	45	50
	Throw	3.0	4.0	5.5	6.5	8.0	9.0	10.5	11.5	14.5	17.0	20.0
12"	CFM	235	315	395	470	550	630	705	785	945	1100	1260
An .780	Ps	.015	.015	.023	.033	.045	.060	.072	.094	.132	.180	.230
Ak .397	NC	<20	<20	<20	20	25	30	35	35	40	45	50
	Throw	4.0	5.5	7.0	8.5	10.0	11.5	13.0	14.5	17.5	20.5	24.0
14"	CFM	320	430	535	640	750	855	960	1070	1280	1500	1710
An 1.07	Ps	.023	.023	.036	.051	.071	.093	.115	.140	.205	.277	.350
Ak .393	NC	<20	<20	<20	25	30	35	35	40	45	50	55
	Throw	5.0	7.0	8.5	10.5	12.0	13.5	15.5	17.0	20.5	24.0	24.5

Terminal Velocity of 75 FPM
An = Neck Area in Sq. Ft.
NC = Noise Criteria based on 10dB room absorption (Re: 10^{-12} watts).

HVS, HVS R6, FPD FPD3 (Page 95)

		400	500	600	700	800	900	1000	1200	1400	1600
6"	CFM	80	100	120	135	155	175	195	235	275	315
An .200	Ps	.008	.012	.017	.021	.028	.035	.043	.063	.086	.112
Ak .780	NC	<20	<20	<20	<20	<20	<20	20	25	30	35
	Throw	2.0	3.0	3.0	3.5	4.0	4.5	5.0	6.0	7.0	8.0
8"	CFM	140	175	210	245	280	315	350	420	490	560
An .350	Ps	.010	.015	.022	.029	.038	.049	.060	.086	.117	.150
Ak .920	NC	<20	<20	<20	<20	20	25	30	35	35	40
	Throw	3.5	4.5	5.5	6.5	7.0	8.0	9.0	10.5	12.5	14.5
10"	CFM	220	270	325	380	435	490	545	655	765	870
An .540	Ps	.014	.021	.030	.041	.054	.068	.084	.122	.167	.212
Ak 1.200	NC	<20	<20	<20	20	25	30	35	35	40	45
	Throw	5.5	7.0	8.5	10.0	11.0	12.5	14.0	17.0	19.5	22.0
12"	CFM	315	390	470	550	630	705	785	940	1100	1255
An .780	Ps	.015	.023	.033	.045	.060	.072	.094	.132	.180	.230
Ak 1.650	NC	<20	<20	20	25	30	35	35	40	45	45
	Throw	6.0	7.5	9.0	10.5	12.0	13.5	15.0	18.0	21.0	24.0
14"	CFM	430	535	640	750	855	960	1070	1285	1500	1710
An 1.070	Ps	.023	.036	.051	.071	.093	.115	.140	.205	.277	.350
Ak 2.060	NC	<20	<20	20	25	30	35	40	40	45	45
	Throw	6.5	8.0	9.5	11.5	13.0	14.5	16.0	19.0	22.5	25.0

Terminal Velocity of 75 FPM
An = Neck Area in Sq. Ft.
NC = Noise Criteria based on 10dB room absorption (Re: 10^{-12} watts).

RFPS (Page 98)

Neck Velocity		300	400	500	600	700	800	900	1000	1200
6"	CFM	60	80	100	120	140	160	180	200	235
Diameter	Ps	.005	.009	.015	.021	.027	.037	.047	.058	.080
Ak .200	NC	<20	<20	<20	<20	21	26	32	34	39
	Throw	1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.5	6.5
8"	CFM	105	140	175	210	245	280	315	350	420
Diameter	Ps	.007	.012	.019	.027	.037	.049	.060	.074	.110
Ak .350	NC	<20	<20	<20	<20	22	28	33	36	41
	Throw	2.5	3.5	4.5	5.5	6.5	7.0	8.0	9.0	10.5
10"	CFM	165	220	270	325	380	435	490	545	655
Diameter	Ps	.008	.015	.023	.033	.046	.060	.076	.093	.135
Ak .540	NC	<20	<20	<20	22	27	32	36	39	43
	Throw	3.5	4.5	5.5	6.5	7.5	8.5	9.5	11.0	13.0
12"	CFM	235	315	390	470	550	630	705	785	945
Diameter	Ps	.010	.018	.027	.039	.053	.070	.088	.110	.160
Ak .780	NC	<20	<20	<20	20	27	35	38	41	45
	Throw	3.5	5.0	6.0	7.5	8.5	10.0	11.0	12.5	15.0
14"	CFM	320	430	535	640	750	855	960	1070	1285
Diameter	Ps	.011	.020	.031	.045	.060	.080	.105	.125	.180
Ak 1.070	NC	<20	<20	<20	25	31	34	39	43	49
	Throw	4.0	5.5	7.0	8.5	10.0	11.0	12.5	14.0	16.5

Notes: NC is Noise Criteria based on 10dB room absorption (Re: 10^{-12} watts).
Throw in feet measured at a terminal velocity of 100 FPM.
The change in throw due to pattern selection is not significant.
Measurements were made on Alnor Thermo-Anemometer Model 8565.

RENPS, ARENPS, PDS (Page 94, 98)

		300	400	500	600	700	800	900	1000	1100
6"	CFM	60	80	100	120	140	160	180	200	220
Diameter	Ps	.008	.011	.017	.024	.032	.042	.054	.066	.080
An .200	NC	<20	<20	<20	<20	24	27	32	36	38
	Throw	1.0	2.0	3.0	3.0	4.0	4.0	5.0	5.0	6.0
8"	CFM	105	140	175	210	245	280	310	350	385
Diameter	Ps	.008	.011	.017	.024	.034	.043	.054	.068	.083
An .350	NC	<20	<20	<20	20	24	27	30	34	38
	Throw	2.0	3.0	4.0	4.0	5.0	6.0	7.0	8.0	8.5
10"	CFM	165	220	270	325	385	430	490	550	600
Diameter	Ps	.008	.012	.017	.024	.032	.043	.056	.068	.082
An .540	NC	<20	<20	20	24	29	33	36	39	42
	Throw	2.0	3.0	4.0	5.0	5.0	6.0	7.0	8.0	9.0
12"	CFM	230	310	390	470	550	610	700	780	870
Diameter	Ps	.009	.016	.026	.037	.050	.065	.080	.100	.125
An .780	NC	<20	<20	20	23	26	31	34	37	40
	Throw	3.0	4.0	5.0	6.0	7.0	8.0	9.0	10.0	11.0
14"	CFM	315	430	535	640	750	855	960	1090	1200
Diameter	Ps	.009	.016	.026	.037	.050	.065	.083	.125	.150
An 1.070	NC	<20	20	25	30	35	39	43	45	48
	Throw	3.0	5.0	6.0	7.0	8.0	9.0	10.0	11.0	12.0

Note: The use of a balancing hood is recommended to balance the system.
NC is based on 10dB room attenuation (Re: 10^{-12} watts) ASHRAE 36-72.
Terminal Velocity of 75 FPM An = Neck Area in Sq. Ft.

PDSD (Page 99)

Neck Velocity		300	400	500	600	700	800	900	1000	1200
6"	CFM	60	80	100	120	135	155	175	195	235
Diameter	Ps	.007	.013	.020	.029	.037	.048	.062	.076	.110
	NC	<20	<20	<20	20	21	24	28	33	37
	1-Way Throw	4.0	6.0	7.0	8.0	10.0	11.0	13.0	14.0	16.0
An .200	2- and 3-Way Throw	3.5	4.5	6.0	7.0	8.0	9.5	10.5	11.5	13.0
	4-Way Throw	2.5	3.5	4.5	5.0	6.0	7.0	7.5	8.0	9.0
	CFM	105	140	175	210	245	280	315	350	420
8"	Ps	.011	.019	.030	.043	.059	.077	.097	.120	.173
Diameter	NC	<20	<20	<20	20	22	27	31	35	40
	1-Way Throw	6.0	8.0	10.0	11.5	13.0	14.5	16.0	18.0	21.0
An .350	2- and 3-Way Throw	5.0	7.0	8.5	10.5	12.0	13.5	14.5	16.0	19.0
	4-Way Throw	4.0	5.0	6.5	7.5	9.0	10.0	11.5	12.5	14.0
	CFM	165	220	275	325	380	435	490	545	655
10"	Ps	.015	.026	.040	.046	.076	.100	.125	.115	.225
Diameter	NC	<20	<20	<20	21	27	33	37	40	45
	1-Way Throw	8.5	11.0	14.0	16.5	19.0	22.0	25.0	27.0	30.0
An .540	2- and 3-Way Throw	7.5	10.0	12.5	14.5	17.0	19.5	22.0	24.0	27.0
	4-Way Throw	5.0	7.0	8.5	10.5	12.0	14.0	15.5	17.0	20.0
	CFM	235	315	395	470	550	630	705	785	940
12"	Ps	.016	.029	.045	.068	.086	.113	.140	.170	.250
Diameter	NC	<20	<20	<20	20	25	32	35	38	44
	1-Way Throw	10.0	13.0	16.5	19.5	22.0	25.0	27.0	30.0	34.0
An .780	2- and 3-Way Throw	8.5	11.5	14.5	17.5	20.0	22.0	25.0	27.0	30.0
	4-Way Throw	6.0	8.0	10.0	12.0	14.0	16.5	18.0	20.0	23.0
	CFM	320	430	535	640	750	855	960	1070	1285
14"	Ps	.021	.037	.057	.082	.112	.145	.180	.225	.320
Diameter	NC	<20	<20	20	26	31	36	40	44	49
	1-Way Throw	11.0	15.0	19.0	22.5	26.0	29.0	32.0	35.0	39.0
An 1.070	2- and 3-Way Throw	10.0	13.5	17.0	20.0	23.0	26.0	28.0	31.0	35.0
	4-Way Throw	7.0	10.0	12.0	14.4	17.0	19.0	21.0	23.0	27.0

Notes: The use of a balancing hood is recommended to balance the system.
NC is based on 10dB room attenuation (Re: 10^{-12} watts) ASHRAE 36-72.
Terminal Velocity of 75 FPM

Recommended Noise Criteria and Face Velocity Ranges are on page 163.