

### 1500 / 1520 / 1530 / 1540 / 1560 / 1570– Step-Down Diffusers

Neck Velocity		400	500	600	700	800	900	1000	1200	1400	1600
6"	cfm	80	100	120	135	155	175	195	235	275	315
An .20	Ps	.008	.012	.017	.021	.028	.035	.043	.063	.086	.112
Ak .78	NC	x	x	x	x	x	x	20	25	30	35
	Throw	2	3	3	3	4	4.5	5	6	7	8
8"	cfm	140	175	210	245	280	315	350	420	490	560
An .35	Ps	.010	.015	.022	.029	.038	.049	.060	.086	.117	.150
Ak .92	NC	x	x	x	x	20	25	30	35	40	45
	Throw	3.5	4.5	5.5	6.5	7	8	9	10.5	12.5	14.5
10"	cfm	220	270	325	380	435	490	545	655	765	870
An .54	Ps	.014	.021	.030	.041	.054	.068	.084	.122	.167	.212
Ak 1.2	NC	x	x	x	20	25	30	35	35	40	45
	Throw	5.5	7	8.5	10	11	12.5	14	17	19.5	22
12"	cfm	315	390	470	550	630	705	785	940	1100	1255
An .78	Ps	.015	.023	.033	.045	.060	.072	.094	.132	.180	.230
Ak 1.65	NC	x	x	20	25	30	35	35	40	45	45
	Throw	6	7.5	9	10.5	12	13.5	15	18	21	24
14"	cfm	430	535	640	750	855	960	1070	1285	1500	1710
An 1.07	Ps	.023	.036	.051	.071	.093	.115	.140	.205	.277	.350
Ak 2.06	NC	x	x	20	25	30	35	40	40	45	45
	Throw	6.5	8	9.5	11.5	13	14.5	16	19	22.5	25

NOTE: The use of a balancing hood is recommended to balance the system.  
 An = Neck Area in square feet  
 Ak = Effective Area in square feet  
 Ps = Static Pressure Loss in inches of water  
 NC = Noise Criteria, based on a 10dB room attenuation (Re: 10<sup>-12</sup> watts) ASHRAE 36-72.  
 x = an NC less than 20  
 Terminal Velocity of 75 fpm

### 1600 – Adjustable Round Diffuser

Neck Velocity		500	600	700	800	900	1000	1200	1400	1600	1800
6"	cfm	80	95	110	130	145	160	190	225	255	290
Ak .16	Ps	<.01	<.01	<.01	.014	.016	.02	.027	.038	.049	.062
	Throw	2	2.5	3	3.5	4.5	5	6	7	8	9
8"	cfm	140	170	195	225	250	280	335	390	450	505
Ak .28	Ps	<.01	<.01	<.01	.013	.016	.02	.028	.038	.05	.063
	Throw	3.5	4	4.5	5	5.5	6.5	7.5	9	10.5	12
10"	cfm	220	265	310	350	395	440	530	615	705	790
Ak .44	Ps	<.01	<.01	.01	.013	.016	.02	.029	.041	.051	.065
	Throw	4	4.5	5	6	7	8	9	11	13	14
12"	cfm	330	395	460	530	595	660	790	925	1025	1190
Ak .66	Ps	<.01	<.01	.01	.013	.017	.021	.029	.04	.05	.063
	Throw	5	6	7	8	9	10	12	14	16	18
14"	cfm	455	545	640	730	820	910	1090	1275	1455	1640
Ak .91	Ps	<.01	<.01	.011	.014	.017	.021	.03	.04	.053	.067
	Throw	6	7	8	9	10.5	12	14	16	18	21
16"	cfm	600	720	840	960	1080	1200	1440	1680	1920	2160
Ak 1.2	Ps	<.01	<.01	.01	.013	.016	.02	.028	.039	.05	.063
	Throw	7	8	9	10.5	12	13.5	16	19	22	24
18"	cfm	750	900	1050	1200	1350	1500	1800	2100	2400	2700
Ak 1.5	Ps	<.01	<.01	.01	.013	.017	.021	.03	.04	.052	.062
	Throw	8	9	10	12	13.5	15	18	21	24	27

NC<35

NC >35

NOTE: Core in "out" position. Terminal velocity of 100 fpm.  
 When diffusers are used on an exposed duct, multiply throw by 0.7.