

1150 Evaporative Cooler Diffuser

Face Velocity		400	500	600	700	800	900	1000	1200	1400	1600	1800	2000
14 x 14	CFM	383	479	574	670	766	861	957	1148	1340	1531	1723	1914
Ak .960	Pt	.043	.064	.090	.119	.152	.188	.228	.318	.421	.536	.665	.806
18 x 18	CFM	464	580	696	812	928	1044	1160	1392	1624	1856	2088	2320
Ak 1.160	Pt	.028	.042	.056	.075	.094	.115	.138	.190	.248	.313	.383	.460
20 x 20	CFM	537	670	804	938	1072	1206	1340	1608	1876	2144	2412	2680
Ak 1.340	Pt	.028	.042	.059	.077	.098	.121	.146	.203	.267	.339	.419	.505
22 x 22	CFM	668	836	1003	1170	1337	1504	1671	2005	2339	2674	3008	3342
Ak 1.670	Pt	.017	.027	.040	.056	.075	.097	.121	.179	.250	.333	.428	.537
24 x 24	CFM	730	912	1094	1277	1459	1642	1824	2189	2554	2918	3283	3648
Ak 1.820	Pt	.032	.048	.066	.086	.109	.134	.161	.222	.291	.367	.452	.544
30 x 30	CFM	1118	1398	1678	1957	2237	2516	2796	3355	3914	4474	5033	5592
Ak 2.790	Pt	.026	.040	.057	.076	.098	.122	.149	.211	.283	.365	.457	.558
36 x 36	CFM	1404	1756	2107	2458	2809	3160	3511	4213	4915	5618	6320	7022
Ak 3.510	Pt	.030	.043	.060	.078	.098	.120	.144	.197	.257	.324	.397	.477

Notes:

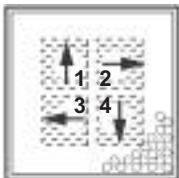
1. Tests conducted in accordance with ASHRAE 70-1991.
2. Total Pressure is the sum of the status and velocity pressure.
3. Ak is the effective area of the diffuser face.
4. Tests conducted with all valves in fully opened position.

1160 Evaporative Cooler

Listed Size	Neck Velocity	400	500	600	700	800	900	1000	1200	1400	1600	1800	2000
22 x 22 Ak 1.343	Airflow Rate (CFM)	537	537	672	806	940	1074	1209	1343	1612	1880	2149	2417
	Total Pressure (in WC)	.028	.042	.059	.077	.098	.121	.146	.203	.267	.339	.419	.505

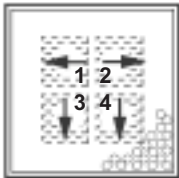
Notes:

1. Tests conducted in accordance with ASHRAE 70-1991.
2. Total Pressure is the sum of the status and velocity pressure.
3. Ak is the effective area of the diffuser face.
4. Tests conducted with all valves in fully opened position.



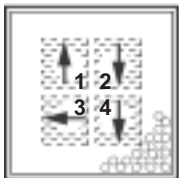
Four-Way (Short Throw)

- For throw in all four directions, use short throw data.



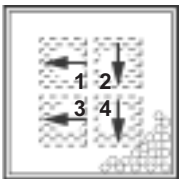
Three-Way (Short Throw)

- For throw in all three directions, use short throw data.



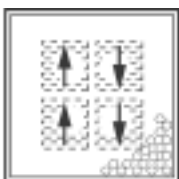
Three-Way (Long and Short)

- For throw in the #2 and #4 directions, use long throw data.
- For throw in the #1 and #3 directions, use short throw data.



Two-Way Corner (Long and Short)

- For throw in the #2 and #4 directions, use long throw data.
- For throw in the #1 and #3 directions, use short throw data.



Two-Way (Long Throw)

- For throw in both directions, use long throw data.

1235 Perforated Supply

Neck Velocity		300	400	500	600	700	800	900	1000	1200	1400
Velocity Pressure		.006	.010	.016	.022	.031	.040	.051	.062	.090	.122
6" Diameter	CFM	60	80	100	120	140	160	180	200	240	280
	Total Pressure	.005	.008	.013	.025	.025	.032	.041	.050	.027	.098
	Short Horizontal Throw	2-1-1	2-1-1	3-1-1	3-2-1	4-2-1	4-2-1	5-2-2	5-3-2	6-3-2	7-4-2
	Long Horizontal Throw	3-1-1	4-2-1	5-2-2	6-3-2	7-3-2	8-4-3	9-4-3	10-5-3	12-6-4	14-7-5
Noise Criteria		<20	<20	<20	<20	<20	22	24	26	31	37
8" Diameter	CFM	105	140	175	210	245	280	315	350	420	490
	Total Pressure	.009	.015	.024	.034	.046	.061	.077	.095	.136	.185
	Short Horizontal Throw	3-1-1	4-2-1	5-2-2	6-4-3	7-3-2	8-4-3	9-4-3	10-5-3	12-6-4	14-7-5
	Long Horizontal Throw	5-3-2	7-4-2	9-5-3	11-5-4	13-6-4	15-7-5	16-8-5	18-9-6	22-11-7	25-13-8
Noise Criteria		<20	<20	<20	<20	20	25	30	34	39	44
10" Diameter	CFM	165	220	275	330	385	440	495	550	660	770
	Total Pressure	.013	.023	.036	.052	.071	.092	.117	.144	.208	.283
	Short Horizontal Throw	5-2-2	6-3-2	8-4-3	10-5-3	11-6-4	13-6-4	14-7-5	16-8-5	19-10-6	23-11-8
	Long Horizontal Throw	9-5-3	12-6-4	15-8-5	18-9-6	21-11-7	24-12-8	27-14-9	30-15-10	36-18-12	42-21-14
Noise Criteria		<20	<20	<20	22	25	28	33	36	41	47
12" Diameter	CFM	240	320	400	480	560	640	720	800	960	1120
	Total Pressure	.017	.030	.047	.068	.093	.121	.153	.189	.273	.371
	Short Horizontal Throw	7-4-2	10-5-3	12-6-4	15-7-5	17-9-6	20-10-7	22-11-7	25-12-8	30-15-10	35-17-12
	Long Horizontal Throw	14-7-5	19-9-6	23-12-8	28-14-9	33-16-11	37-19-12	42-21-14	47-23-16	56-28-19	65-33-22
Noise Criteria		<20	<20	21	25	29	32	35	38	44	50
14" Diameter	CFM	330	440	550	660	770	880	990	1100	1320	1540
	Total Pressure	.020	.036	.057	.081	.111	.145	.183	.226	.326	.443
	Short Horizontal Throw	11-6-4	15-7-5	18-9-6	22-11-7	26-13-9	29-15-10	33-17-11	37-18-12	44-22-15	52-26-17
	Long Horizontal Throw	21-10-7	28-14-9	34-17-11	41-21-14	48-24-16	55-28-18	62-31-21	69-34-23	83-41-28	97-48-32
Noise Criteria		<20	<20	25	31	36	40	43	45	48	53

Notes: Tests conducted in accordance with ANSI/ASHRAE 70-1991 at isothermal conditions.

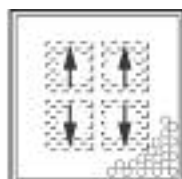
Tests conducted with a straight rigid inlet condition. Other inlet conditions may alter performance.

Unit of measure: Neck Velocity = FPM; Velocity Pressure = in. w.c.; Airflow Rate = CFM; Total Pressure = in. w.c.;

Throw = ft at 50, 100, and 150 FPM terminal velocity

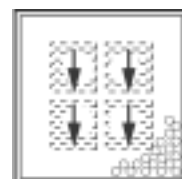
Noise Criteria (NC) is based upon 10dB room absorption (Re: 10⁻¹² watts) evaluated at 125 thru 4000 Hz octave bands.

Flow hoods are recommended for system balancing.



Two-Way (Short Throw)

- For throw in both directions, use short throw data.



One-Way (Long Throw)

- For throw, use long throw data.