

210 Floor Register (Page 4)

Face Velocity		300	400	500	600	700	800	900	1000
Pressure Loss		.006	.010	.016	.022	.031	.040	.050	.062
4 x 10 Ak .20	CFM	60	80	100	120	140	160	180	200
	Throw	8	11	13	16	19	22	24	26
4 x 12 and 6 x 8 Ak .25	CFM	75	100	125	150	175	200	225	250
	Throw	9	12	15	18	21	25	28	31
4 x 14 Ak .28	CFM	85	110	140	170	195	225	250	280
	Throw	6	10	15	19	22	25	28	32
6 x 10 and 8 x 8 Ak .32	CFM	95	130	160	190	225	255	290	320
	Throw	10	14	17	21	24	27	31	34
6 x 12 Ak .38	CFM	115	150	190	230	265	305	340	380
	Throw	12	15	19	23	26	30	34	38
8 x 10 Ak .42	CFM	125	170	210	250	295	335	380	420
	Throw	12	15	18	24	28	32	37	41
6 x 14 Ak .44	CFM	130	175	220	265	310	350	395	440
	Throw	13	16	20	24	28	32	36	41
6 x 16 Ak .49	CFM	145	195	245	295	345	390	440	490
	Throw	11	16	21	25	30	35	39	44
8 x 12 and 10 x 10 Ak .53	CFM	160	210	265	320	370	425	475	530
	Throw	12	17	21	26	32	37	43	48
9 x 12 and 8 x 14 Ak .60	CFM	180	240	300	360	420	480	540	600
	Throw	14	20	24	29	34	39	44	50
10 x 12 Ak .65	CFM	195	260	325	390	455	520	585	650
	Throw	14	18	24	30	35	41	46	51
8 x 16 and 9 x 14 Ak .69	CFM	205	275	345	415	485	550	620	690
	Throw	15	21	27	32	37	42	48	53
10 x 14 and 12 x 12 Ak .78	CFM	235	310	390	470	545	625	700	780
	Throw	14	21	28	34	40	46	51	56
10 x 16 Ak .88	CFM	265	350	440	530	615	705	790	880
	Throw	17	23	30	36	41	48	53	60
12 x 14 Ak .93	CFM	280	370	465	560	650	745	835	930
	Throw	18	24	30	37	43	50	56	62
12 x 16 and 14 x 14 Ak 1.07	CFM	320	430	535	640	750	855	965	1070
	Throw	20	26	32	39	46	53	59	64
12 x 18 and 14 x 16 Ak 1.22	CFM	365	490	610	730	855	975	1100	1220
	Throw	21	28	34	42	49	56	62	68
14 x 18 Ak 1.42	CFM	425	570	710	850	995	1135	1280	1420
	Throw	22	30	37	45	52	58	63	68
12 x 24 and 14 x 20 Ak 1.59	CFM	475	635	795	955	1115	1270	1430	1590
	Throw	23	31	39	46	52	59	65	71

Terminal Velocity of 50 FPM

411 Floor Diffuser (Page 4)

Face Velocity		300	400	500	600	700	800	900	1000
Pressure Loss		.006	.010	.016	.022	.031	.040	.050	.062
2 1/4 x 10 Ak .09	CFM	25	35	45	55	60	70	80	90
	Spread	3.0	4.0	5.0	6.5	7.5	9.0	10.0	11.0
	Throw	2.0	2.5	3.0	4.0	4.5	5.0	6.0	6.5
2 1/4 x 12 Ak .11	CFM	35	45	55	65	75	90	100	110
	Spread	3.0	4.5	6.0	7.0	8.5	9.5	11.0	12.0
	Throw	2.0	3.0	3.5	4.0	5.0	6.0	6.5	7.0
2 1/4 x 14 Ak .13	CFM	40	50	65	80	90	105	115	130
	Spread	3.5	5.0	7.0	8.0	9.5	10.5	12.0	13.0
	Throw	2.5	3.0	4.0	4.5	5.5	6.5	7.0	8.0
4 x 10 Ak .17	CFM	50	70	85	100	120	135	155	170
	Spread	4.0	6.0	7.5	9.0	11.0	12.0	13.5	15.5
	Throw	3.0	3.5	4.5	5.5	6.5	7.0	8.0	9.0
4 x 12 Ak .21	CFM	65	85	105	125	145	170	190	210
	Spread	5.0	7.0	8.5	10.0	12.0	13.5	15.5	17.0
	Throw	3.0	4.0	5.0	6.0	7.0	8.0	9.0	10.0
4 x 14 Ak .25	CFM	75	100	125	150	175	200	225	250
	Spread	5.5	7.5	9.5	11.0	13.0	15.0	17.0	18.5
	Throw	3.5	4.5	5.5	6.5	7.5	9.0	10.0	11.0
6 x 10 Ak .27	CFM	80	110	135	160	190	215	245	270
	Spread	6.0	8.0	10.0	11.5	13.5	15.5	17.5	19.5
	Throw	3.5	4.5	6.0	7.0	8.0	9.0	10.5	11.5
6 x 12 Ak .33	CFM	100	130	165	200	230	265	295	330
	Spread	6.5	8.5	11.0	13.0	15.0	17.0	19.5	21.5
	Throw	4.0	5.0	6.5	7.5	9.0	10.0	11.5	12.5
6 x 14 Ak .39	CFM	115	155	195	235	275	310	350	390
	Spread	7.5	9.5	12.0	14.0	17.0	19.0	21.5	23.5
	Throw	4.5	5.5	7.0	8.5	10.0	11.0	12.5	14.0

Terminal Velocity of 50 FPM

265 Return Air Grille (Page 4)

Average Face Velocity*		400	500	600	700	800	900	1000
4 x 12 Ak .295	CFM	120	150	175	205	235	265	295
	Pt	.011	.017	.024	.033	.043	.054	.065
4 x 14 Ak .335	CFM	135	170	200	235	270	300	335
	Pt	.011	.016	.023	.032	.042	.052	.064
6 x 10 Ak .37	CFM	150	185	220	260	295	335	370
	Pt	.010	.016	.022	.031	.041	.051	.063
6 x 12 Ak .445	CFM	180	225	265	310	355	400	445
	Pt	.010	.015	.021	.030	.039	.049	.060
8 x 10 Ak .49	CFM	195	245	295	345	390	440	490
	Pt	.010	.015	.021	.029	.038	.047	.059
6 x 14 Ak .51	CFM	205	255	305	355	410	460	510
	Pt	.010	.015	.020	.029	.038	.047	.058
8 x 12 Ak .565	CFM	235	295	350	410	470	525	585
	Pt	.009	.014	.020	.028	.036	.046	.057
8 x 14 Ak .68	CFM	270	340	410	475	545	610	680
	Pt	.009	.014	.019	.027	.035	.044	.055
10 x 12 Ak .72	CFM	290	360	430	505	575	650	720
	Pt	.009	.014	.019	.027	.035	.043	.054
12 x 12 and 6 x 24 Ak .85	CFM	340	425	510	595	680	765	850
	Pt	.009	.013	.019	.026	.033	.042	.053
6 x 30 Ak 1.03	CFM	410	515	620	720	825	925	1030
	Pt	.008	.012	.018	.024	.032	.040	.049
8 x 24 Ak 1.11	CFM	445	555	665	775	890	1000	1110
	Pt	.008	.012	.018	.024	.031	.039	.048
14 x 14 Ak 1.15	CFM	460	575	690	805	920	1035	1150
	Pt	.008	.012	.018	.024	.031	.039	.048
8 x 30 Ak 1.35	CFM	540	675	810	945	1080	1215	1350
	Pt	.008	.012	.017	.023	.030	.037	.046
14 x 20 Ak 1.58	CFM	630	790	950	1105	1265	1420	1580
	Pt	.007	.011	.016	.022	.029	.036	.045
12 x 24 Ak 1.64	CFM	655	820	985	1150	1310	1475	1690
	Pt	.007	.011	.016	.022	.029	.036	.044
10 x 30 Ak 1.68	CFM	670	840	1010	1175	1345	1510	1680
	Pt	.007	.011	.016	.022	.029	.036	.044
18 x 18 Ak 1.80	CFM	720	900	1080	1260	1440	1620	1800
	Pt	.007	.011	.015	.021	.028	.035	.043
14 x 24 Ak 1.87	CFM	750	935	1120	1310	1495	1685	1870
	Pt	.007	.011	.015	.021	.028	.035	.043
12 x 30 Ak 2.00	CFM	800	1000	1200	1400	1600	1800	2000
	Pt	.007	.011	.015	.021	.027	.034	.042
14 x 30 Ak 2.35	CFM	940	1175	1410	1645	1880	2115	2350
	Pt	.007	.010	.015	.020	.026	.033	.040
24 x 24 Ak 3.10	CFM	1240	1550	1860	2170	2480	2790	3100
	Pt	.006	.010	.014	.019	.024	.031	.038

For sizes not listed and sizing tips see page(s) XX

*Velocity measured 1" from face