

672/674 Return Air Grille (Page 20, 10) 673 Return Air Filter Grille (Page 20)

Face Velocity*		300	400	500	600
6 x 4	CFM	34	45	56	68
Ak .110	Ps	.020	.035	.054	.079
6 x 6	CFM	50	67	84	101
Ak .170	Ps	.019	.035	.054	.079
8 x 4	CFM	45	60	75	90
Ak .150	Ps	.019	.035	.054	.079
8 x 6	CFM	67	89	111	134
Ak .220	Ps	.019	.035	.054	.079
8 x 8	CFM	89	118	148	178
Ak .300	Ps	.019	.035	.054	.078
10 x 4	CFM	56	74	93	112
Ak .190	Ps	.019	.035	.054	.079
10 x 6	CFM	83	111	139	167
Ak .280	Ps	.019	.035	.054	.078
10 x 8	CFM	111	147	184	221
Ak .370	Ps	.019	.034	.054	.078
10 x 10	CFM	138	184	230	276
Ak .460	Ps	.019	.034	.054	.078
12 x 6	CFM	100	133	166	199
Ak .330	Ps	.019	.034	.054	.078
12 x 8	CFM	132	177	221	265
Ak .440	Ps	.019	.034	.054	.078
12 x 10	CFM	165	220	275	330
Ak .550	Ps	.019	.034	.053	.077
12 x 12	CFM	197	263	329	395
Ak .660	Ps	.019	.034	.053	.077
12 x 18	CFM	294	392	491	589
Ak .980	Ps	.019	.034	.053	.075
14 x 6	CFM	116	155	193	232
Ak .390	Ps	.019	.034	.054	.078
14 x 8	CFM	154	205	257	308
Ak .510	Ps	.019	.034	.053	.077
14 x 10	CFM	192	256	320	384
Ak .640	Ps	.019	.034	.053	.077
14 x 12	CFM	230	306	383	460
Ak .770	Ps	.019	.034	.053	.076
14 x 14	CFM	267	357	446	535
Ak .890	Ps	.019	.034	.053	.075
14 x 18	CFM	343	457	571	685
Ak 1.140	Ps	.019	.033	.052	.074

Face Velocity*		300	400	500	600
16 x 6	CFM	132	177	221	265
Ak .440	Ps	.019	.034	.054	.078
16 x 8	CFM	176	234	293	352
Ak .590	Ps	.019	.034	.053	.077
16 x 10	CFM	219	292	365	438
Ak .730	Ps	.019	.034	.053	.076
16 x 12	CFM	262	349	437	524
Ak .870	Ps	.019	.034	.053	.076
16 x 14	CFM	305	407	509	610
Ak 1.020	Ps	.019	.034	.052	.075
16 x 16	CFM	348	464	580	696
Ak 1.160	Ps	.019	.033	.052	.074
16 x 24	CFM	519	692	865	1038
Ak 1.730	Ps	.018	.033	.051	.071
16 x 25	CFM	540	720	900	1081
Ak 1.800	Ps	.018	.033	.051	.071
18 x 6	CFM	149	198	248	297
Ak .500	Ps	.019	.034	.054	.077
18 x 18	CFM	439	585	732	878
Ak 1.460	Ps	.019	.033	.052	.073
18 x 24	CFM	583	777	971	1166
Ak 1.940	Ps	.018	.032	.051	.070
20 x 6	CFM	165	220	275	330
Ak .550	Ps	.019	.034	.053	.077
20 x 10	CFM	273	364	455	546
Ak .910	Ps	.019	.034	.053	.075
20 x 12	CFM	327	435	544	653
Ak 1.090	Ps	.019	.033	.052	.074
20 x 14	CFM	380	507	634	760
Ak 1.270	Ps	.019	.033	.052	.074
20 x 20	CFM	540	720	900	1081
Ak 1.800	Ps	.018	.033	.051	.071
20 x 24	CFM	647	862	1078	1293
Ak 2.160	Ps	.018	.032	.050	.069
20 x 25	CFM	673	898	1122	1346
Ak 2.240	Ps	.018	.032	.050	.069

Face Velocity*		300	400	500	600
24 x 4	CFM	132	177	221	265
Ak .440	Ps	.019	.034	.054	.078
24 x 6	CFM	197	263	329	395
Ak .660	Ps	.019	.034	.053	.077
24 x 8	CFM	262	349	437	524
Ak .870	Ps	.019	.034	.053	.076
24 x 10	CFM	327	435	544	653
Ak 1.090	Ps	.019	.033	.052	.074
24 x 12	CFM	391	521	651	782
Ak 1.300	Ps	.019	.033	.052	.073
24 x 14	CFM	455	607	758	910
Ak 1.520	Ps	.019	.033	.051	.072
24 x 24	CFM	774	1032	1290	1548
Ak 2.580	Ps	.018	.032	.049	.067
30 x 4	CFM	165	220	275	330
Ak .550	Ps	.019	.034	.053	.077
30 x 6	CFM	246	328	410	492
Ak .820	Ps	.019	.034	.053	.076
30 x 8	CFM	327	435	544	653
Ak 1.090	Ps	.019	.033	.052	.074
30 x 10	CFM	407	543	678	814
Ak 1.360	Ps	.019	.033	.052	.073
30 x 12	CFM	487	649	812	974
Ak 1.620	Ps	.018	.033	.051	.072
30 x 14	CFM	567	756	945	1134
Ak 1.890	Ps	.018	.032	.051	.071
30 x 18	CFM	726	968	1210	1452
Ak 2.420	Ps	.018	.032	.050	.068
30 x 20	CFM	806	1074	1343	1611
Ak 2.690	Ps	.018	.031	.049	.067
30 x 24	CFM	964	1286	1607	1928
Ak 3.210	Ps	.017	.031	.048	.064
30 x 30	CFM	1201	1602	2002	2403
Ak 4.000	Ps	.017	.030	.046	.060
36 x 8	CFM	391	521	651	782
Ak 1.300	Ps	.019	.033	.052	.073

For sizes not listed and sizing tips see page 37

*Filter grilles: Tested without filters. Typical capacity is 2 CFM per square inch of nominal filter area. Recommended face velocity is 300-450 FPM. Velocities higher will decrease filter performance, increase flow resistance, and possibly be of noise concern. Velocity measured 1" from face.

661 & A661 2-Way Supply Register (Page 19)

Face Velocity		300	400	500	600	700	800	900	1000
Pressure Loss		.006	.010	.016	.022	.031	.040	.050	.062
6 x 4	CFM	25	30	40	50	55	65	70	80
Ak .080	Throw	4.0	4.5	6.0	7.0	8.5	10.0	11.0	12.5
8 x 4	CFM	35	45	55	65	75	90	100	110
Ak .110	Throw	4.5	5.5	7.0	8.5	10.0	11.5	13.0	14.5
10 x 4 and 8 x 5	CFM	45	60	75	85	100	115	130	145
Ak .145	Throw	5.0	6.5	8.0	9.5	11.5	13.0	14.5	16.0
12 x 4 and 8 x 6	CFM	55	70	90	110	125	145	160	180
Ak .180	Throw	5.5	7.0	9.0	10.5	12.5	14.0	16.0	18.0
14 x 4	CFM	65	85	110	130	150	170	195	215
Ak .215	Throw	6.0	7.5	9.5	11.5	13.5	15.5	17.0	19.0
10 x 6 and 12 x 5	CFM	75	100	125	145	170	195	220	245
Ak .245	Throw	6.0	8.0	10.0	12.0	14.0	16.0	18.0	20.0
12 x 6 and 14 x 5	CFM	90	120	150	175	205	235	265	295
Ak .295	Throw	6.5	8.5	11.0	13.0	15.5	17.5	19.5	22.0
10 x 8	CFM	105	140	175	205	240	275	310	345
Ak .345	Throw	7.0	9.0	11.5	13.5	16.5	18.5	21.0	23.5
14 x 6	CFM	110	145	180	215	250	290	325	360
Ak .360	Throw	7.0	9.5	12.0	14.0	16.5	19.0	21.5	24.0

Terminal Velocity of 75 FPM

Face Velocity		300	400	500	600	700	800	900	1000
Pressure Loss		.006	.010	.016	.022	.031	.040	.050	.062
16 x 6 and 12 x 8	CFM	130	170	215	255	300	340	385	425
Ak .425	Throw	7.5	10.0	12.5	15.0	18.0	20.5	23.0	25.5
14 x 8	CFM	155	205	260	310	360	410	465	515
Ak .515	Throw	8.0	10.5	14.0	16.0	19.5	22.0	25.0	28.0
20 x 6	CFM	165	220	275	330	385	440	495	550
Ak .550	Throw	8.5	11.0	14.5	17.0	20.0	23.0	25.5	29.0
16 x 8	CFM	180	240	300	360	420	480	540	600
Ak .600	Throw	8.5	11.0	14.5	17.0	20.0	23.0	25.5	29.0
24 x 6 and 18 x 8	CFM	205	270	340	410	475	545	610	680
Ak .680	Throw	9.5	12.0	15.5	18.5	22.0	25.0	28.0	31.5
20 x 8	CFM	230	305	380	455	530	610	685	760
Ak .760	Throw	10.0	13.0	16.5	19.0	23.0	26.0	28.5	33.0
30 x 6	CFM	265	350	440	530	615	705	790	880
Ak .880	Throw	10.5	14.0	17.5	20.5	24.5	28.0	31.5	35.0
24 x 8	CFM	295	390	490	590	685	785	880	980
Ak .980	Throw	11.0	14.0	18.0	21.5	25.5	29.0	33.0	37.0
30 x 8	CFM	375	500	625	750	875	1000	1125	1250
Ak 1.250	Throw	12.0	16.0	20.0	24.0	28.5	32.0	37.0	41.0