

A618 Adjustable Fin Register (Page 16) Deflection A

Face Velocity		300	400	500	600	700	800	900	1000	1100	1200
Pressure Loss		.006	.010	.016	.022	.031	.040	.050	.062	.075	.090
8x4 Ak .156	cfm Throw	45 5	60 6.5	80 8.5	95 10	110 12	125 13	140 15	155 16	170 18	185 19
10x4 Ak .198	cfm Throw	60 6	80 7.5	100 9.5	120 12	140 13	160 15	180 17	200 19	220 20	240 22
12x4 Ak .240	cfm Throw	70 6	95 8	120 10	145 12	170 14	190 16	215 18	240 20	265 22	290 25
10x6 Ak .313	cfm Throw	95 7	125 9	155 12	190 14	220 16	250 19	280 21	315 23	345 26	375 28
12x6 Ak .379	cfm Throw	115 8	150 10	190 13	225 15	265 18	305 21	340 23	380 26	415 28	455 31
10x8 Ak .425	cfm Throw	130 8	170 11	215 14	255 16	300 19	340 21	385 24	425 27	470 30	510 32
14x6 Ak .446	cfm Throw	135 8	180 11	225 14	270 17	310 19	355 22	400 25	445 28	490 30	545 33
12x8 Ak .530	cfm Throw	160 9	200 11	265 15	320 18	370 21	425 24	475 27	530 30	585 33	635 36
14x8 Ak .620	cfm Throw	185 10	250 13	310 16	370 20	435 23	495 26	560 30	620 33	680 36	745 39

Terminal Velocity of 75 fpm

A618 Adjustable Fin Register (Page 16) Deflection C

Face Velocity		300	400	500	600	700	800	900	1000	1100	1200
Pressure Loss		.006	.010	.016	.022	.031	.040	.050	.062	.075	.090
8x4 Ak .141	cfm Throw	40 3.5	55 5	70 6.5	85 7.5	100 9	115 10	125 11	140 13	155 14	170 15
10x4 Ak .178	cfm Throw	55 4	70 5.5	90 7	105 8.5	125 10	140 11	160 13	180 14	195 16	215 17
12x4 Ak .216	cfm Throw	65 4.5	85 6	110 8	130 9.5	150 11	175 13	195 14	215 16	240 18	260 19
10x6 Ak .282	cfm Throw	85 5.5	115 7.5	140 9	170 11	195 12	225 14	255 16	280 18	310 20	340 22
12x6 Ak .342	cfm Throw	105 6	135 8	170 10	205 12	240 14	275 16	310 18	340 20	375 22	410 24
10x8 Ak .390	cfm Throw	115 6	155 8	195 11	235 13	275 15	310 17	350 19	390 21	430 23	470 26
14x6 Ak .412	cfm Throw	125 7	165 9	205 11	245 13	290 16	330 18	370 20	410 22	455 24	495 27
12x8 Ak .470	cfm Throw	140 7	190 9	235 12	280 14	330 16	375 19	425 21	470 23	515 25	565 28
14x8 Ak .550	cfm Throw	165 8	220 10	275 13	330 15	385 18	440 20	495 23	550 25	605 28	660 30

Terminal Velocity of 75 fpm

A618 Adjustable Fin Register (Page 16) Deflection E

Face Velocity		300	400	500	600	700	800	900	1000	1100	1200
Pressure Loss		.006	.010	.016	.022	.031	.040	.050	.062	.075	.090
8x4 Ak .127	cfm Throw	40 3	50 4	65 5	75 5.5	90 7	100 7.5	115 8.5	125 9.5	140 11	150 11.5
10x4 Ak .162	cfm Throw	50 3	65 4.5	80 5.5	95 6.5	115 7.5	130 8.5	145 9.5	160 11	180 12	195 13
12x4 Ak .197	cfm Throw	60 4	80 4.5	100 6	120 7.5	140 8.5	160 10	175 11	195 12	215 13	235 14
10x6 Ak .257	cfm Throw	75 4	105 5.5	130 7.5	155 8.5	180 9.5	205 11	230 12	255 14	285 15	310 17
12x6 Ak .311	cfm Throw	95 4.5	125 6	155 7.5	185 9	220 11	250 12	280 14	310 15	340 17	375 18
10x8 Ak .350	cfm Throw	105 5	140 6	175 8	210 10	245 11	280 13	315 14	350 16	385 18	420 19
14x6 Ak .365	cfm Throw	110 5.5	145 6.5	185 8.5	220 10	255 11	290 13	330 15	365 16	400 18	440 20
12x8 Ak .435	cfm Throw	130 5	175 7	220 9	260 11	305 13	350 15	390 16	435 18	480 20	520 22
14x8 Ak .510	cfm Throw	155 6	205 8	255 10	305 12	355 14	410 16	460 18	510 20	560 22	610 23

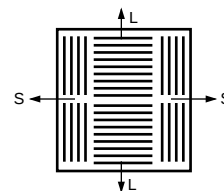
Terminal Velocity of 75 fpm

A618 Adjustable Fin Register (Page 16) Deflection G

Face Velocity		300	400	500	600	700	800	900	1000	1100	1200
Pressure Loss		.006	.010	.016	.022	.031	.040	.050	.062	.075	.090
8x4 Ak .118	cfm Throw	35 2	45 2.5	60 3.5	70 4	85 5	95 5.5	105 6	120 6.5	130 7.5	140 8
10x4 Ak .149	cfm Throw	45 2	60 3	75 3.5	90 4.5	105 5	120 6	135 6.5	150 7.5	165 8	180 9
12x4 Ak .181	cfm Throw	55 2.5	70 3	90 4	110 5	125 5.5	145 6.5	165 7.5	180 8	200 9	215 10
10x6 Ak .236	cfm Throw	70 3	95 4	120 5	140 5.5	165 6.5	190 7.5	210 8.5	235 9.5	260 10	285 11
12x6 Ak .286	cfm Throw	85 3	115 4	145 5	170 6	200 7	230 8.5	255 9	285 10	315 11	345 12
10x8 Ak .320	cfm Throw	95 3	130 4.5	160 5.5	190 6.5	225 7.5	255 8.5	290 10	320 11	350 12	385 13
14x6 Ak .336	cfm Throw	100 3.5	135 4.5	170 5.5	200 6.5	235 7.5	270 8	300 9	335 10	370 11	405 13
12x8 Ak .395	cfm Throw	120 3.5	160 5	200 6	235 7	275 8	315 9	355 10	395 11	435 12	475 15
14x8 Ak .460	cfm Throw	140 4	185 5.5	230 6.5	275 8	320 9	370 10.5	415 11.5	460 13	505 14.5	550 15.5

Terminal Velocity of 75 fpm

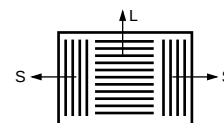
See Alternative sizing graph on page XXX



621 Sidewall/Ceiling Register 4-Way Deflection (Page 17)

Face Velocity		300	400	500	600	700	800	900	1000
Pressure Loss		.006	.010	.016	.022	.031	.040	.050	.062
6x6 Ak .14	cfm Throw L/S	40 4.5/3.5	55 6.5/5	70 8/6.5	85 10/8	100 11.5/9.5	110 12.5/10.5	125 14.5/12	140 16/13.5
8x8 Ak .28	cfm Throw L/S	85 6.5/5.5	110 9/7.5	140 11/9.5	170 13.5/11.5	195 15.5/13	225 18/15	250 20/16.5	280 22.5/18.5
10x10 Ak .44	cfm Throw L/S	130 8/6.5	175 11/9	220 14/11.5	265 17/14	310 20/16.5	350 22/18	395 25/21	440 28/23
12x12 Ak .68	cfm Throw L/S	205 10.5/8.5	270 14/11	340 17.5/14	410 21/17	475 24.5/19.5	545 28/22.5	610 30/25	680 33/28
14x14 Ak .93	cfm Throw L/S	280 11/9.5	370 14.5/12.5	465 18.5/16	560 22/19	650 26.5/22	745 30/25.5	835 32.5/28	930 36/31
16x16 Ak 1.28	cfm Throw L/S	385 13/11	510 17.5/14	640 22/18	770 26.5/21.5	895 30/25	1025 35/28	1150 39/32	1280 43/36

Terminal Velocity of 75 fpm



631 Register (Page 17)

Face Velocity		300	400	500	600	700	800	900	1000
Pressure Loss		.006	.010	.016	.022	.031	.040	.050	.062
10x6 Ak .18	cfm Throw L/S	85 4.0/8.0	110 5.5/10	140 7.0/13	170 8.5/16	195 9.5/19	225 11/21	250 13/24	280 15/26
12x6 Ak .34	cfm Throw L/S	100 4.0/8.0	135 5.0/10	170 6.0/13	205 7.5/16	240 9.0/20	275 10/22	305 11.5/24	340 13/28
10x8 Ak .38	cfm Throw L/S	115 3.5/9.5	150 5.0/13	190 6.0/16	230 7.0/18	265 8.0/21	305 9.0/24	340 10.5/29	380 11.5/32
14x6 Ak .40	cfm Throw L/S	120 4.0/10	160 5.0/12	200 6.5/16	240 8.0/19	280 9.0/22	320 10/24	360 11/27	400 12.5/30
12x8 Ak .47	cfm Throw L/S	140 4.5/10	190 6.0/13	235 7.5/15	280 9.0/18	330 10/21	375 11.5/25	425 13/28	470 14.5/31
14x8 Ak .55	cfm Throw L/S	165 4.0/10	220 5.5/13.5	275 7.5/18	330 8.5/22	385 10/25	440 11.5/29	495 13/33	550 15/36

Terminal Velocity of 50 fpm