

681 1-Way Sidewall/Ceiling Register (Page 20)

Face Velocity		300	400	500	600	700	800	900	1000
Pressure Loss		.006	.010	.016	.022	.031	.040	.050	.062
8x6 Ak .140	cfm Throw	40 5	55 6	70 8	90 9	100 11	110 12	125 14	140 15
10x6 Ak .185	cfm Throw	55 5	80 7	95 10	110 11	130 13	150 14	165 16	185 18
12x6 Ak .225	cfm Throw	70 6	90 8	115 12	135 12	160 14	180 16	205 18	225 20
14x6 Ak .290	cfm Throw	85 7	115 9	145 12	175 14	205 17	230 19	260 21	290 24
16x6 Ak .330	cfm Throw	100 8	130 10	165 12	200 15	230 18	265 20	295 23	330 25
18x6 Ak .390	cfm Throw	115 8	155 11	195 21	235 17	275 20	310 22	350 25	390 28
20x6 Ak .440	cfm Throw	130 5	175 12	220 24	265 18	310 21	360 24	395 27	440 30

Terminal Velocity of 75 fpm

682 2-Way Sidewall/Ceiling Register (Page 21)

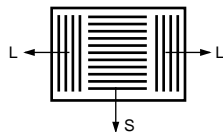
Face Velocity		300	400	500	600	700	800	900	1000
Pressure Loss		.006	.010	.016	.022	.031	.040	.050	.062
8x4 Ak .090	cfm Throw	25 2	35 3.5	45 4.5	55 5.5	65 6.5	70 7	80 8	90 9
6x6 Ak .105	cfm Throw	30 3	40 3.5	50 4.5	65 6	75 7	85 8	95 9	105 10
10x4 Ak .115	cfm Throw	35 3	45 4	60 5	70 6	80 7	90 8	105 9	115 10
12x4 Ak .140	cfm Throw	40 3.5	55 4.5	70 5.5	85 6.5	100 8	110 9	125 10	140 11.5
10x6 Ak .185	cfm Throw	55 4	75 5	95 6.5	110 8	130 9	150 10.5	165 12	185 13
8x8 Ak .200	cfm Throw	60 4	80 5.5	100 7	120 8	140 9.5	160 11	180 12.5	200 13.5
12x6 Ak .225	cfm Throw	70 4.5	90 6	115 7.5	135 8.5	160 10.5	180 12	205 13	225 14.5
14x6 Ak .290	cfm Throw	85 5	115 6.5	145 8.5	175 10.5	205 12.5	230 13.5	260 15	290 17
10x10 Ak .310	cfm Throw	95 5	125 7	155 8.5	185 10	215 12	250 14	280 15.5	310 17
12x8 Ak .320	cfm Throw	95 5.5	130 7	160 9	190 10.5	225 12.5	255 14	290 16	320 18
14x8 Ak .390	cfm Throw	115 6	155 8	195 10	235 12	275 14	310 16	350 18	390 20
12x12 Ak .470	cfm Throw	140 6.5	190 8.5	235 10.5	280 12.5	330 15	375 17	425 19	470 21

Terminal Velocity of 75 fpm

683 3-Way Sidewall/Ceiling Register (Page 21)

Face Velocity		300	400	500	600	700	800	900	1000
Pressure Loss		.006	.010	.016	.022	.031	.040	.050	.062
8x4 Ak .090	Total cfm cfm L/S Throw L/S	25 13/6 3/2.5	35 17/9 4/3	45 24/11 5/3.5	55 29/13 6/4	65 34/16 7/5	70 37/17 7.5/5.5	80 42/19 8.5/6	90 48/22 10/6.5
6x6 Ak .105	Total cfm cfm L/S Throw L/S	30 10/10 3/3	40 13/14 3.5/3.5	50 16/17 4/4	65 21/22 5.5/5.5	75 24/26 6/6	85 27/29 7/7	95 30/32 8/8	105 34/36 9/9
10x4 Ak .115	Total cfm cfm L/S Throw L/S	35 21/7 4/2	45 29/8 5/2.5	60 32/8/11 6/3.5	70 45/13 7.5/4	80 51/14 8.5/4.5	90 58/16 9.5/5	105 67/19 11/6	115 74/21 12/6.5
12x4 Ak .140	Total cfm cfm L/S Throw L/S	40 21/10 3.5/2.5	55 29/13 5/3	70 36/17 6/4	85 44/20 7.5/5	100 52/24 8.5/5.5	110 57/26 9.5/6	125 65/30 10.5/7	140 73/34 12/8
10x6 Ak .185	Total cfm cfm L/S Throw L/S	55 35/10 4.5/2.5	75 48/14 6.5/3.5	95 61/17 8/4	110 70/20 9/5	130 83/23 11.5/5.5	150 96/27 12.5/6.5	165 106/30 14/7.5	185 118/33 15.5
8x8 Ak .200	Total cfm cfm L/S Throw L/S	60 31/14 4.5/3	80 42/19 5/2.5	100 52/24 7.5/5	120 62/29 8.5/6	140 73/34 10.5/7	160 83/38 11.5/8	180 94/43 13/9	200 104/48 14.5/10
12x6 Ak .225	Total cfm cfm L/S Throw L/S	70 36/17 4.5/3.5	90 47/22 6/4	115 60/28 8.5/5	135 70/32 9/6	160 83/38 11/7.5	180 94/43 12.5/8	205 107/49 14/6.5	225 117/54 15.5/10.5
14x6 Ak .290	Total cfm cfm L/S Throw L/S	85 51/17 5.5/3.5	115 69/23 7.5/4.5	145 87/29 10/5.5	175 105/35 12/6.5	205 123/41 14/8	230 138/46 15.5/9	260 156/52 18/10	290 174/58 20/11
10x10 Ak .310	Total cfm cfm L/S Throw L/S	95 61/17 6/3.5	125 80/23 8/4.5	155 99/28 10/5.5	185 118/33 12/6.5	215 138/39 14/7.5	250 160/45 16.5/9	280 179/50 18/9.5	310 198/56 20/10.5
12x8 Ak .320	Total cfm cfm L/S Throw L/S	95 49/23 5.5/4	130 68/31 7.5/5	160 83/38 9.5/6	190 99/46 11/7.5	225 117/54 13/9	255 133/61 15/10	290 151/70 17/11.5	320 166/77 19/12.5
14x8 Ak .390	Total cfm cfm L/S Throw L/S	115 69/23 6.5/4	155 93/31 9/5	195 117/39 11/6	235 141/47 13.5/7.5	275 165/55 16/9	310 186/62 20/11.5	350 210/70 22/12.5	390 234/78 22/12.5
12x12 Ak .470	Total cfm cfm L/S Throw L/S	140 73/34 7.4/5	190 99/46 9/6	235 122/56 11.5/7.5	280 146/67 13.5/9	330 172/79 16/10.5	375 195/90 18/12	425 221/102 20/14	470 244/113 23/15.5
14x14 Ak .650	Total cfm cfm L/S Throw L/S	195 117/39 8.5/5	260 156/52 11.5/6.5	325 195/65 14/8	390 234/78 17/9.5	455 273/91 20/11.5	520 312/104 23/13	585 351/117 26/14.5	650 390/130 28/16
16x16 Ak .930	Total cfm cfm L/S Throw L/S	280 164/67 10/6.5	370 192/89 13/9	465 242/112 16.5/11	560 291/134 20/13	650 338/156 23/15.5	745 387/179 26/17	835 434/200 29/20	930 484/223 33/22

Terminal Velocity of 75 fpm



684 4-Way Sidewall/Ceiling Register (Page 21)

Face Velocity		300	400	500	600	700	800	900	1000
Pressure Loss		.006	.010	.016	.022	.031	.040	.050	.062
6x6 Ak .105	Total cfm cfm L/S Throw L/S	30 4/11 2/3	40 6/14 2/3.5	50 8/17 3/4	65 10/22 3.5/5.5	75 12/26 4.5/6.5	85 14/29 5/7	95 15/32 5.5/8	105 17/36 6/9
8x8 Ak .200	Total cfm cfm L/S Throw L/S	60 16/14 3/3	80 21/19 4/4	100 26/24 5/5	120 31/29 6/6	140 37/34 7.5/7	160 42/38 8.5/8	180 47/43 9.5/9	200 52/48 10.5/10
10x10 Ak .310	Total cfm cfm L/S Throw L/S	95 31/17 4.5/3.5	125 40/23 6/4.5	155 50/28 7/5.5	185 59/33 8.5/6.5	215 69/39 10/7.5	250 80/45 11/9	280 90/50 13/9.5	310 99/56 14.5/10.5
12x12 Ak .470	Total cfm cfm L/S Throw L/S	140 37/34 5/4.5	190 61/56 6.5/6	235 73/67 8.5/8	280 86/79 9.5/9	330 98/90 11.5/10.5	375 111/102 13/12	425 145/14 16/15.5	470 167/15.5
14x14 Ak .650	Total cfm cfm L/S Throw L/S	195 59/39 6/5	260 78/52 8/6.5	325 98/65 10/8	390 117/78 12/9.5	455 137/91 14/11.5	520 156/104 16/13	585 176/117 18/14.5	650 195/130 20/16
16x16 Ak .930	Total cfm cfm L/S Throw L/S	280 73/67 7/6.5	370 96/89 9/9	465 121/112 11.5/11	560 146/134 14/13	650 169/156 16/15.5	745 194/179 19/17	835 217/200 21/20	930 242/223 23/22

Terminal Velocity of 75 fpm

RZ421 Register (Page 22)

Face Velocity		300	400	500	600	700	800	900	1000
2 x 12 Ak 0.084	CFM	25	34	42	50	59	67	76	84
	Ps	0.01	0.02	0.03	0.05	0.06	0.08	0.10	0.12
	Throw	2	2.5	3.5	4	4.5	5.5	6	6.5
	Spread	1.5	2	2.5	3	3	3.5	4	4.5
4 x 10 Ak 0.141	CFM	42	56	71	85	99	113	127	141
	Ps	0.02	0.02	0.03	0.04	0.06	0.07	0.09	0.11
	Throw	2	2.5	3	3.5	4.5	5	5.5	6
	Spread	0.5	1.5	2.5	3	4	5	5.5	6.5
4 x 12 Ak 0.157	CFM	47	63	79	94	110	126	141	157
	Ps	0.02	0.03	0.04	0.05	0.07	0.09	0.11	0.13
	Throw	1.5	2	2.5	3	3.5	4	4.5	5
	Spread	0.5	1.5	2.5	4	5	6	7	8

Terminal Velocity of 50 FPM