

RZSRT Throw

Term Velocity	75									
Neck Velocity	400	500	600	700	800	900	1000	1200	1400	1600
cfm	79	98	118	137	157	177	196	236	275	314
6"	3.1	3.9	4.6	5.4	6.2	7.0	7.7	9.3	10.8	12.4
cfm	140	175	209	244	279	314	349	419	489	559
8"	5.3	6.7	8.0	9.3	10.7	12.0	13.3	16.0	18.7	21.3
cfm	218	273	327	382	436	491	545	654	764	873
10"	6.3	7.9	9.4	11.0	12.6	14.1	15.7	18.8	22.0	25.1
cfm	314	393	471	550	628	707	785	942	1100	1257
12"	7.1	8.8	10.6	12.4	14.2	15.9	17.7	21.2	24.8	28.3
cfm	428	535	641	748	855	962	1069	1283	1497	1710
14"	9.1	11.3	13.6	15.9	18.1	20.4	22.7	27.2	31.8	36.3

RZSRT Throw

Term Velocity	150									
Neck Velocity	400	500	600	700	800	900	1000	1200	1400	1600
cfm	79	98	118	137	157	177	196	236	275	314
6"	1.3	1.7	2.0	2.4	2.7	3.0	3.4	4.0	4.7	5.4
cfm	140	175	209	244	279	314	349	419	489	559
8"	2.2	2.7	3.3	3.8	4.4	4.9	5.5	6.6	7.7	8.8
cfm	218	273	327	382	436	491	545	654	764	873
10"	2.5	3.1	3.7	4.4	5.0	5.6	6.2	7.5	8.7	10.0
cfm	314	393	471	550	628	707	785	942	1100	1257
12"	3.8	4.8	5.8	6.7	7.7	8.6	9.6	11.5	13.4	15.3
cfm	428	535	641	748	855	962	1069	1283	1497	1710
14"	4.2	5.2	6.3	7.3	8.3	9.4	10.4	12.5	14.6	16.7

RZMCDST Register (Page 23)

RZMCDST		Neck Velocity fpm									
		400	500	600	700	800	900	1000	1200	1400	1600
6"	cfm	79	98	118	137	157	177	196	236	275	314
	Static Pressure	0.003	0.005	0.007	0.010	0.013	0.017	0.021	0.030	0.041	0.054
	Total Pressure	0.018	0.023	0.026	0.035	0.043	0.067	0.086	0.120	0.166	0.209
	NC	-	-	-	30	-	16	20	24	30	34
8"	cfm	140	175	209	244	279	314	349	419	489	559
	Static Pressure	0.004	0.006	0.008	0.011	0.014	0.017	0.020	0.028	0.036	0.045
	Total Pressure	0.013	0.021	0.030	0.041	0.053	0.066	0.081	0.115	0.155	0.201
	NC	-	-	-	-	17	22	24	34	37	41
10"	cfm	218	273	327	382	436	491	545	654	764	873
	Static Pressure	0.004	0.007	0.010	0.013	0.017	0.022	0.027	0.039	0.053	0.069
	Total Pressure	0.014	0.021	0.031	0.042	0.055	0.070	0.086	0.124	0.170	0.222
	NC	-	-	-	17	22	26	34	42	44	48
12"	cfm	314	393	471	550	628	707	785	942	1100	1257
	Static Pressure	0.006	0.009	0.012	0.017	0.022	0.028	0.034	0.048	0.065	0.084
	Total Pressure	0.015	0.024	0.035	0.047	0.061	0.077	0.095	0.137	0.186	0.242
	NC	-	-	-	20	24	27	35	40	45	49
14"	cfm	428	535	641	748	855	962	1069	1283	1497	1710
	Static Pressure	0.008	0.013	0.018	0.024	0.031	0.040	0.048	0.069	0.093	0.120
	Total Pressure	0.017	0.030	0.041	0.056	0.071	0.090	0.114	0.144	0.200	0.278
	NC	-	-	15	23	27	34	39	44	48	51
16"	cfm	559	698	838	977	1117	1257	1396	1676	1955	2234
	Static Pressure	0.012	0.019	0.028	0.037	0.048	0.061	0.075	0.107	0.145	0.189
	Total Pressure	0.022	0.034	0.049	0.066	0.086	0.108	0.134	0.192	0.260	0.339
	NC	-	-	24	27	31	38	40	45	49	51

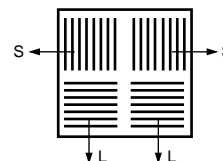
- Indicates less than NC15

RZMCDST Throw
75 fpm Terminal Velocity

Neck Velocity		400	500	600	700	800	900	1000	1200	1400	1600
cfm		79	98	118	137	157	177	196	236	275	314
6"	1-direction	3.5	4.4	5.3	6.2	7.1	7.9	8.8	10.6	12.4	14.1
	2-direction	4.5	5.6	6.8	7.9	9.0	10.2	11.3	13.6	15.8	18.1
	3-direction Short	0.9	1.1	1.3	1.5	1.7	2.0	2.2	2.6	3.0	3.5
	3-direction Long	1.2	1.5	1.8	2.1	2.5	2.8	3.1	3.7	4.3	4.9
	4-direction	0.6	0.8	0.9	1.1	1.2	1.4	1.5	1.8	2.1	2.5

Neck Velocity		400	500	600	700	800	900	1000	1200	1400	1600
cfm		140	175	209	244	279	314	349	419	489	559
8"	1-direction	3.1	3.9	4.6	5.4	6.2	7.0	7.7	9.3	10.8	12.4
	2-direction	4.4	5.5	6.6	7.7	8.8	9.9	11.0	13.2	15.4	17.6
	3-direction Short	2.0	2.5	3.0	3.5	4.0	4.5	5.0	6.0	7.1	8.1
	3-direction Long	3.5	4.4	5.3	6.2	7.0	7.9	8.8	10.6	12.3	14.1
	4-direction	1.5	1.9	2.3	2.7	3.1	3.4	3.8	4.6	5.4	6.1

Neck Velocity		400	500	600	700	800	900	1000	1200	1400	1600
cfm		218	273	327	382	436	491	545	654	764	873
10"	1-direction	6.1	7.6	9.2	10.7	12.2	13.7	15.3	18.3	21.4	24.4
	2-direction	7.1	8.9	10.7	12.5	14.3	16.1	17.8	21.4	25.0	28.5
	3-direction Short	2.1	2.6	3.1	3.7	4.2	4.7	5.2	6.3	7.3	8.4
	3-direction Long	6.4	8.0	9.6	11.2	12.8	14.4	16.0	19.2	22.4	25.6
	4-direction	2.9	3.6	4.3	5.0	5.7	6.4	7.1	8.6	10.0	11.4

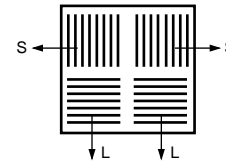


RZMCDST Throw
75 fpm Terminal Velocity

Neck Velocity		400	500	600	700	800	900	1000	1200	1400	1600
cfm		314	393	471	550	628	707	785	942	1100	1257
12"	1-direction	9.8	12.2	14.7	17.1	19.6	22.0	24.5	29.3	34.2	39.1
	2-direction	9.1	11.4	13.6	15.9	18.2	20.5	22.7	27.3	31.8	36.4
	3-direction Short	3.6	4.5	5.4	6.3	7.2	8.1	9.0	10.8	12.6	14.4
	3-direction Long	8.0	10.0	12.0	14.0	16.0	18.0	20.1	24.1	28.1	32.1
	4-direction	2.1	2.6	3.1	3.7	4.2	4.7	5.2	6.3	7.3	8.4

Neck Velocity		400	500	600	700	800	900	1000	1200	1400	1600
cfm		428	535	641	748	855	962	1069	1283	1497	1710
14"	1-direction	12.1	15.1	18.2	21.2	24.2	27.3	30.3	36.3	42.4	48.5
	2-direction	8.4	10.5	12.6	14.7	16.8	18.9	21.0	25.2	29.4	33.6
	3-direction Short	3.9	4.9	5.9	6.8	7.8	8.8	9.8	11.7	13.7	15.7
	3-direction Long	7.0	8.8	10.5	12.3	14.0	15.8	17.5	21.0	24.5	28.0
	4-direction	2.8	3.5	4.2	4.9	5.6	6.3	7.0	8.4	9.8	11.2

Neck Velocity		400	500	600	700	800	900	1000	1200	1400	1600
cfm		559	698	838	977	1117	1257	1396	1676	1955	2234
16"	1-direction	24.3	30.4	36.5	42.5	48.6	54.7	60.8	72.9	85.1	97.2
	2-direction	14.1	17.6	21.1	24.6	28.1	31.7	35.2	42.2	49.3	56.3
	3-direction Short	11.2	14.0	16.8	19.7	22.5	25.3	28.1	33.7	39.3	44.9
	3-direction Long	16.3	20.4	24.5	28.6	32.7	36.7	40.8	49.0	57.1	65.3
	4-direction	3.2	4.0	4.9	5.7	6.5	7.3	8.1	9.7	11.3	12.9



RZMCDST Throw
150 fpm Terminal Velocity

Neck Velocity		400	500	600	700	800	900	1000	1200	1400	1600
cfm		79	98	118	137	157	177	196	236	275	314
6"	1-direction	1.5	1.9	2.3	2.6	3.0	3.4	3.8	4.2	4.5	4.9
	2-direction	1.7	2.1	2.5	3.0	3.4	3.8	4.2	4.7	5.1	5.5
	3-direction Short	0.6	0.7	0.9	1.0	1.2	1.3	1.5	1.6	1.8	1.9
	3-direction Long	0.3	0.4	0.4	0.5	0.6	0.7	0.7	0.8	0.9	0.9
	4-direction	0.6	0.7	0.8	1.0	1.1	1.2	1.4	1.5	1.7	1.8

Neck Velocity		400	500	600	700	800	900	1000	1200	1400	1600
cfm		140	175	209	244	279	314	349	419	489	559
8"	1-direction	1.6	2.1	2.5	2.9	3.3	3.7	4.1	4.5	4.9	5.4
	2-direction	1.7	2.1	2.5	2.9	3.3	3.8	4.2	4.6	5.0	5.4
	3-direction Short	1.3	1.6	1.9	2.3	2.6	2.9	3.2	3.5	3.9	4.2
	3-direction Long	1.5	1.9	2.2	2.6	3.0	3.3	3.7	4.1	4.5	4.8
	4-direction	1.1	1.4	1.6	1.9	2.2	2.5	2.7	3.0	3.3	3.6

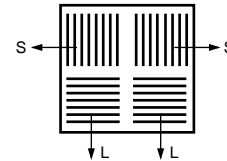
Neck Velocity		400	500	600	700	800	900	1000	1200	1400	1600
cfm		218	273	327	382	436	491	545	654	764	873
10"	1-direction	3.0	3.7	4.5	5.2	6.0	6.7	7.5	8.2	9.0	9.7
	2-direction	2.8	3.5	4.1	4.8	5.5	6.2	6.9	7.6	8.3	9.0
	3-direction Short	1.5	1.9	2.2	2.6	3.0	3.4	3.7	4.1	4.5	4.8
	3-direction Long	2.5	3.1	3.7	4.3	5.0	5.6	6.2	6.8	7.4	8.1
	4-direction	2.3	2.9	3.4	4.0	4.6	5.2	5.7	6.3	6.9	7.5

RZMCDST Throw
150 fpm Terminal Velocity

		Neck Velocity										
		400	500	600	700	800	900	1000	1200	1400	1600	
		cfm	314	393	471	550	628	707	785	942	1100	1257
12"	1-direction	3.4	4.3	5.2	6.0	6.9	7.8	8.6	9.5	10.3	11.2	
	2-direction	2.1	2.6	3.1	3.6	4.1	4.7	5.2	5.7	6.2	6.7	
	3-direction Short	2.4	3.0	3.6	4.2	4.8	5.4	6.0	6.7	7.3	7.9	
	3-direction Long	2.1	2.6	3.1	3.6	4.1	4.7	5.2	5.7	6.2	6.7	
	4-direction	1.7	2.1	2.5	2.9	3.3	3.8	4.2	4.6	5.0	5.4	

		Neck Velocity										
		400	500	600	700	800	900	1000	1200	1400	1600	
		cfm	428	535	641	748	855	962	1069	1283	1497	1710
14"	1-direction	5.3	6.6	7.9	9.3	10.6	11.9	13.2	14.5	15.9	17.2	
	2-direction	3.0	3.8	4.6	5.3	6.1	6.8	7.6	8.3	9.1	9.9	
	3-direction Short	2.3	2.9	3.5	4.1	4.6	5.2	5.8	6.4	6.9	7.5	
	3-direction Long	2.6	3.2	3.9	4.5	5.1	5.8	6.4	7.1	7.7	8.4	
	4-direction	2.2	2.7	3.2	3.8	4.3	4.9	5.4	5.9	6.5	7.0	

		Neck Velocity										
		400	500	600	700	800	900	1000	1200	1400	1600	
		cfm	559	698	838	977	1117	1257	1396	1676	1955	2234
16"	1-direction	14.9	18.6	22.3	26.0	29.7	33.5	37.2	40.9	44.6	48.3	
	2-direction	7.0	8.7	10.4	12.2	13.9	15.6	17.4	19.1	20.9	22.6	
	3-direction Short	5.2	6.5	7.8	9.1	10.4	11.7	13.0	14.3	15.6	16.9	
	3-direction Long	6.7	8.4	10.0	11.7	13.4	15.1	16.7	18.4	20.1	21.8	
	4-direction	2.0	2.5	3.0	3.5	4.0	4.5	5.0	5.5	6.0	6.6	


16 Round Ceiling Diffuser (Page 25)

Face Velocity		300	400	500	600	700	800	900	1000
Pressure Loss		.006	.010	.016	.022	.031	.040	.050	.062
6"	cfm		55	65	80	95	105	120	135
Ak .135	Throw		2.5	3	3.5	4	4.5	5	5.5
8"	cfm	70	90	115	135	160	180	200	225
Ak .225	Throw	2	3	3.5	4.5	5	5.5	6.5	7
10"	cfm	105	140	175	210	240	275	310	345
Ak .345	Throw	2.5	3.5	4.5	5	6	7	8	8.5
12"	cfm	150	200	250	300	350	400	450	500
Ak .500	Throw	3	4	5	6	7.5	8.5	9	10.5
14"	cfm	190	250	315	375	440	500	565	625
Ak .625	Throw	3.5	4.5	5.5	6.5	8	9	10	11
18"	cfm	310	415	520	625	730	830	935	1040
Ak 1.04	Throw	4.5	6	7	8.5	10	11.5	13	14.5

Terminal Velocity of 50 fpm

24 Square Ceiling Diffuser (Page 27)

Face Velocity		300	400	500	600	700	800	900	1000
Pressure Loss		.006	.010	.016	.022	.031	.040	.050	.062
6"	cfm	50	65	85	100	115	130	150	165
Ak .165	Throw	3.5	4.5	5.5	6.5	8	9	10	11
8"	cfm	85	110	140	170	195	225	250	280
Ak .280	Throw	4.5	5.5	7	8.5	10	11	12	14
10"	cfm	125	170	210	250	295	335	380	420
Ak .420	Throw	5	6.5	8	9.5	11.5	13	15	16
12"	cfm	180	240	300	355	415	475	535	595
Ak .595	Throw	6	8	10	11.5	13.5	15.5	17.5	19
14"	cfm	245	330	410	490	575	655	740	820
Ak .820	Throw	7	9	11.5	13.5	16	18	20	22.5
16"	cfm	310	410	515	620	720	825	925	1030
Ak 1.03	Throw	7.5	10	12.5	15	18	20	22	25
18"	cfm	400	530	665	800	930	1065	1200	1330
Ak 1.33	Throw	8.5	11	14	17	20	23	26	28
20"	cfm	480	640	800	960	1120	1280	1440	1600
Ak 1.60	Throw	9.5	12	16	18	22	25	28	31
22"	cfm	570	760	950	1140	1330	1520	1710	1900
Ak 1.90	Throw	10.5	13.5	17	19	24	27	30	33
24"	cfm	690	920	1150	1380	1610	1840	2070	2300
Ak 2.30	Throw	11	14.5	18.5	22	26	30	33	36

Terminal Velocity of 50 fpm