

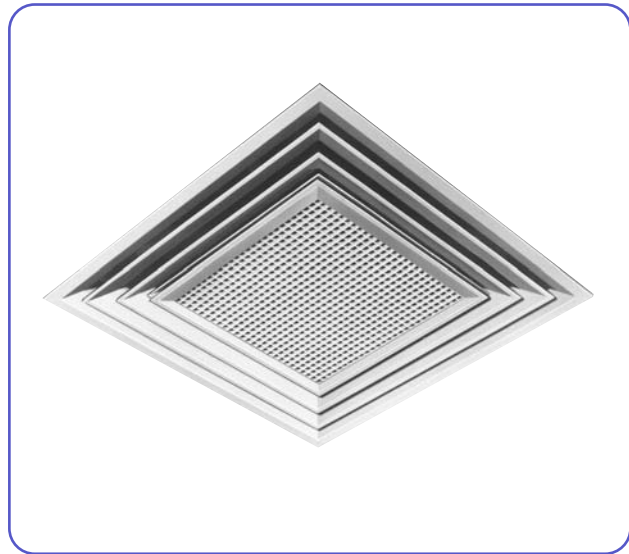
### APPLICATION INFORMATION

The extruded aluminum square and rectangular supply and return diffusers are designed principally for packaged roof top type heating and air conditioning units. They are recommended for heating, ventilating or cooling in ceiling installations that required a four-way horizontal pattern.

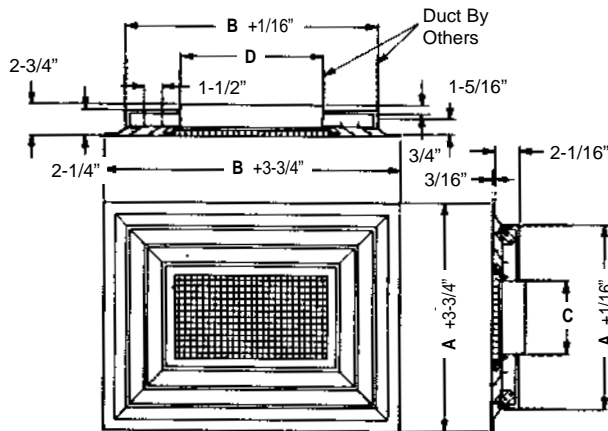
### FEATURES

#### Supply and Return

The Model SARM diffuser is a four-way pattern diffuser designed for heating or cooling. It is used when it is desirable to have one unit handle both the supply and return air. The return air duct is inside the supply air duct and attaches to a separate collar on the return air section of the diffuser.



### DIMENSIONAL DATA

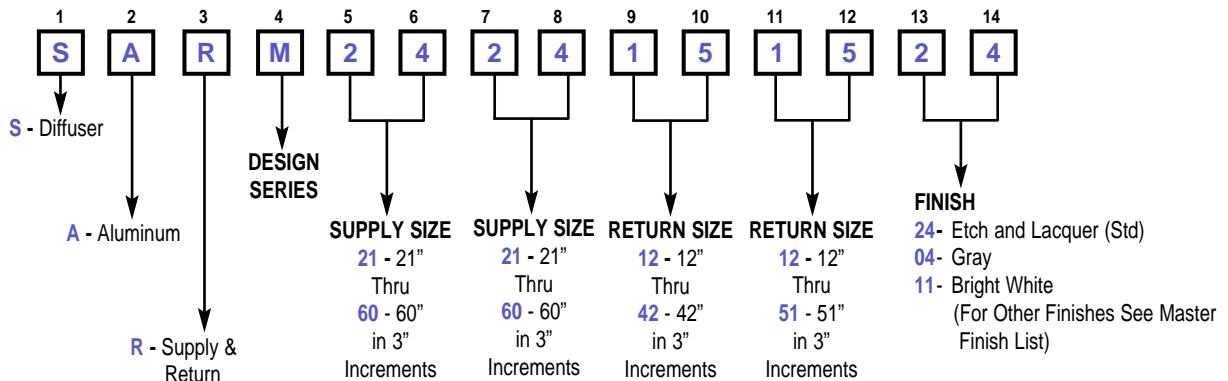


MINIMUM CEILING OPENING A + 2 x B + 2

#### Diffuser Dimensions

Supply Size A x B	Return Size C x D	Supply Size A x B	Return Size C x D	Supply Size A x B	Return Size C x D	Supply Size A x B	Return Size C x D
21x21	12x12	27x60	18x51	36x48	24x36	45x60	30x45
21x36	12x27	30x30	21x21	36x60	24x48	48x48	33x33
21x48	12x39	33x33	21x21	39x39	27x27	48x60	33x45
21x60	12x51	33x36	21x24	42x42	27x27	51x51	36x36
24x24	15x15	30x36	21x27	42x48	27x33	54x54	36x36
24x36	15x27	33x42	21x30	39x48	27x36	54x60	36x43
24x48	15x39	22x48	21x36	42x60	27x45	51x60	36x45
24x60	15x51	30x48	21x39	39x60	27x48	57x57	39x39
27x27	18x18	33x60	21x48	45x45	30x30	57x60	39x42
27x36	18x27	30x60	21x51	45x48	30x33	60x60	42x42
27x48	18x39	26x36	24x24				

### Modeling Number System



Sq. & Rect. Louvered Diffusers

Throws are based on supply air temperature equal to room temperature. Chilled supply air will therefore result in throw values less than tabulated.

The valve shown as the “minimum distance from the wall” is the minimum distance from a wall the diffuser can be mounted and sustain a velocity no greater than 50 FPM in the occupied zone (the room space) below the 6 foot level, excluding the space within 6 inches of the walls and floor).

The “maximum throw” value is the distance from the diffuser at which the terminal velocity (the highest sustained velocity in the mixed air stream) is reduced to a maximum of 50 FPM. The value should be considered when air streams are to be directed toward each other or toward obstructions.

**Selection Procedure**

The Model SARM supply and return diffusers provide delivery of conditioned air and the return of exhaust air. Selection data for the square and rectangular diffusers are located in Tables 1 and 2. Performance characteristics are recorded as function of neck velocity.

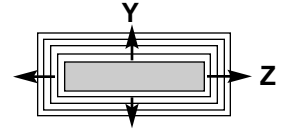
*NC is the noise criteria which will not be exceeded by the diffuser in a room having a room attenuation equaling 10 decibels (db). Rating “L” indicates an NC level less than 20 db. Sound data is based on 10<sup>12</sup> watt.*

Neck SIZE		DUCT VELOCITY — FPM						
		300	400	500	600	700	800	
21x21	Supply	CFM Total	<b>618</b>	<b>824</b>	<b>1030</b>	<b>1237</b>	<b>1443</b>	<b>1650</b>
		CFM Each Side	154	206	257	309	360	412
		PT	.045	.080	.125	.181	.246	.310
		Minimum Distance from Wall	6	8	10	12	14	16
		Maximum Throw	9	12	15	18	21	24
		NC	21	29	34	39	43	47
12x12	Return	CFM	<b>300</b>	<b>400</b>	<b>500</b>	<b>600</b>	<b>700</b>	<b>800</b>
		PT	.005	.009	.013	.019	.025	.035
		NC	21	29	34	39	43	47
24x24	Supply	CFM Total	<b>732</b>	<b>976</b>	<b>1220</b>	<b>1464</b>	<b>1708</b>	<b>1952</b>
		CFM Each Side	183	244	305	366	427	488
		PT	.045	.080	.125	.181	.246	.310
		Minimum Distance from Wall	6	8	10	12	14	16
		Maximum Throw	9	12	15	18	21	24
		NC	23	30	35	40	44	47
15x15	Return	CFM	<b>468</b>	<b>624</b>	<b>780</b>	<b>936</b>	<b>1092</b>	<b>1248</b>
		PT	.005	.009	.013	.019	.025	.035
		NC	23	30	35	40	44	47
27x27	Supply	CFM Total	<b>843</b>	<b>1124</b>	<b>1405</b>	<b>1688</b>	<b>1967</b>	<b>2248</b>
		CFM Each Side	210	281	351	422	492	562
		PT	.045	.080	.125	.181	.246	.310
		Minimum Distance from Wall	7	9	11	14	15	18
		Maximum Throw	10	13	16	20	23	26
		NC	23	30	36	41	45	48
18x18	Return	CFM	<b>675</b>	<b>900</b>	<b>1125</b>	<b>1350</b>	<b>1575</b>	<b>1800</b>
		PT	.005	.009	.013	.019	.025	.035
		NC	23	30	36	41	45	48
30x30	Supply	CFM Total	<b>957</b>	<b>1276</b>	<b>1595</b>	<b>1914</b>	<b>2223</b>	<b>2552</b>
		CFM Each Side	239	319	398	479	558	638
		PT	.045	.080	.125	.181	.246	.310
		Minimum Distance from Wall	7	9	12	14	16	18
		Maximum Throw	10	13	17	20	23	26
		NC	23	31	36	41	45	49
21x21	Return	CFM	<b>918</b>	<b>1224</b>	<b>1530</b>	<b>1836</b>	<b>2142</b>	<b>2448</b>
		PT	.005	.009	.013	.019	.025	.035
		NC	23	31	36	41	45	49
33x33	Supply	CFM Total	<b>1350</b>	<b>1800</b>	<b>2250</b>	<b>2700</b>	<b>3150</b>	<b>3600</b>
		CFM Each Side	338	450	563	675	788	900
		PT	.045	.080	.125	.181	.246	.310
		Minimum Distance from Wall	7	10	13	15	18	20
		Maximum Throw	11	15	19	22	26	30
		NC	24	32	38	43	47	50
21x21	Return	CFM	<b>918</b>	<b>1224</b>	<b>1530</b>	<b>1836</b>	<b>2142</b>	<b>2448</b>
		PT	.005	.009	.013	.019	.025	.035
		NC	24	32	38	43	47	50

Sq. & Rect. Louvered Diffusers

Neck SIZE		DUCT VELOCITY — FPM						
		300	400	500	600	700	800	
36x36	Supply	CFM Total	1500	2000	2500	3000	3500	4000
		CFM Each Side	375	500	625	750	875	1000
		PT	.045	.080	.125	.181	.246	.310
		Minimum Distance from Wall	8	11	13	16	18	21
		Maximum Throw	12	16	19	23	27	31
		NC	25	32	38	43	47	51
24x24	Return	CFM	1200	1600	2000	2400	2800	3200
		PT	.005	.009	.013	.019	.025	.035
		NC	25	32	38	43	47	51
		CFM Total	1650	2200	2750	3300	3850	4400
39x39	Supply	CFM Total	1650	2200	2750	3300	3850	4400
		CFM Each Side	413	550	688	825	963	1100
		PT	.045	.080	.125	.181	.246	.310
		Minimum Distance from Wall	8	11	14	16	19	22
		Maximum Throw	12	16	20	24	29	33
		NC	25	33	39	44	47	51
27x27	Return	CFM	1518	2024	2530	3036	3542	4048
		PT	.005	.009	.013	.019	.025	.035
		NC	25	33	39	44	47	51
		CFM Total	2160	2880	3600	4320	5040	5760
42x42	Supply	CFM Total	2160	2880	3600	4320	5040	5760
		CFM Each Side	540	720	900	1080	1260	1440
		PT	.045	.080	.125	.181	.246	.310
		Minimum Distance from Wall	10	12	16	19	22	25
		Maximum Throw	14	18	24	28	33	37
		NC	27	34	40	45	49	52
27x27	Return	CFM	1518	2024	2530	3036	3542	4048
		PT	.005	.009	.013	.019	.025	.035
		NC	27	34	40	45	49	52
		CFM Total	2343	3124	3905	4686	5467	6248
45x45	Supply	CFM Total	2343	3124	3905	4686	5467	6248
		CFM Each Side	586	781	976	1172	1367	1562
		PT	.045	.080	.125	.181	.246	.310
		Minimum Distance from Wall	10	13	16	19	23	26
		Maximum Throw	15	19	24	29	34	38
		NC	27	35	40	45	49	53
30x30	Return	CFM	1875	2500	3125	3750	4375	5000
		PT	.005	.009	.013	.019	.025	.035
		NC	27	35	40	45	49	53
		CFM Total	2532	3376	4220	5064	5908	6752
48x48	Supply	CFM Total	2532	3376	4220	5064	5908	6752
		CFM Each Side	633	844	1055	1266	1477	1688
		PT	.045	.080	.125	.181	.246	.310
		Minimum Distance from Wall	10	14	17	20	24	27
		Maximum Throw	15	20	25	30	35	40
		NC	27	35	41	45	49	53
33x33	Return	CFM	2268	3024	3780	4536	5292	6048
		PT	.005	.009	.013	.019	.025	.035
		NC	27	35	41	45	49	53
		CFM Total	2718	2624	4530	5436	6342	7248
51x51	Supply	CFM Total	2718	2624	4530	5436	6342	7248
		CFM Each Side	680	906	1133	1359	1586	1812
		PT	.045	.080	.125	.181	.246	.310
		Minimum Distance from Wall	11	14	17	21	25	28
		Maximum Throw	16	21	26	32	37	42
		NC	28	35	41	46	50	53
36x36	Return	CFM	2700	3600	4500	5400	6300	7200
		PT	.005	.009	.013	.019	.025	.035
		NC	28	35	41	46	50	53
		CFM Total	3375	4500	5625	6750	7875	9000
54x54	Supply	CFM Total	3375	4500	5625	6750	7875	9000
		CFM Each Side	844	1125	1406	1687	1968	2250
		PT	.045	.080	.125	.181	.246	.310
		Minimum Distance from Wall	12	16	20	24	28	32
		Maximum Throw	18	24	30	36	42	48
		NC	28	36	42	47	51	54
36x36	Return	CFM	2700	3600	4500	5400	6300	7200
		PT	.005	.009	.013	.019	.025	.035
		NC	28	36	42	47	51	54
		CFM Total	3600	4800	6000	7200	8400	9600
57x57	Supply	CFM Total	3600	4800	6000	7200	8400	9600
		CFM Each Side	900	1200	1500	1800	2100	2400
		PT	.045	.080	.125	.181	.246	.310
		Minimum Distance from Wall	13	17	21	25	30	34
		Maximum Throw	19	25	31	38	44	50
		NC	29	36	42	47	51	54
39x39	Return	CFM	3168	4224	5280	6336	7392	8448
		PT	.005	.009	.013	.019	.025	.035
		NC	29	36	42	47	51	54
		CFM Total	3825	5100	6375	7650	8925	10200
60x60	Supply	CFM Total	3825	5100	6375	7650	8925	10200
		CFM Each Side	956	1275	1594	1913	2231	2550
		PT	.045	.080	.125	.181	.246	.310
		Minimum Distance from Wall	13	17	22	26	32	35
		Maximum Throw	19	26	33	39	48	52
		NC	29	37	42	47	51	55
42x42	Return	CFM	3675	4900	6125	7350	8575	9800
		PT	.005	.009	.013	.019	.025	.035
		NC	29	37	42	47	51	55

Sq. & Rect. Louvered Diffusers



Neck SIZE		DUCT VELOCITY — FPM						
		300	400	500	600	700	800	
21x36	Supply	CFM Total	<b>900</b>	<b>1200</b>	<b>1500</b>	<b>1800</b>	<b>2100</b>	<b>2400</b>
		CFM Side Y	295	394	492	591	689	788
		CFM Size Z	155	206	258	309	361	413
		PT	.045	.080	.125	.181	.246	.310
		Minimum Distance from Wall - Y	7	10	12	14	17	19
		Maximum Throw - Y	11	14	18	21	25	26
		Minimum Distance from Wall - Z	6	8	10	12	14	16
		Maximum Throw - Z	9	12	15	18	21	24
		NC	23	30	36	41	45	48
12x27	Return	CFM	<b>675</b>	<b>900</b>	<b>1125</b>	<b>1350</b>	<b>1575</b>	<b>1800</b>
		PT	.005	.009	.013	.019	.025	.035
		NC	23	30	36	41	45	48
21x48	Supply	CFM Total	<b>1125</b>	<b>1500</b>	<b>1875</b>	<b>2250</b>	<b>2625</b>	<b>3000</b>
		CFM Side Y	408	544	680	815	951	1087
		CFM Size Z	155	206	258	310	361	413
		PT	.045	.080	.125	.181	.246	.310
		Minimum Distance from Wall - Y	8	11	14	16	19	22
		Maximum Throw - Y	12	16	20	24	28	32
		Minimum Distance from Wall - Z	6	8	10	12	14	16
		Maximum Throw - Z	9	12	15	18	21	24
		NC	24	31	37	42	46	49
12x39	Return	CFM	<b>975</b>	<b>1300</b>	<b>1625</b>	<b>1950</b>	<b>2275</b>	<b>2600</b>
		PT	.005	.009	.013	.019	.025	.035
		NC	24	31	37	42	46	49
21x60	Supply	CFM Total	<b>1350</b>	<b>1800</b>	<b>2250</b>	<b>2700</b>	<b>3150</b>	<b>3600</b>
		CFM Side Y	520	694	867	1040	1214	1387
		CFM Size Z	155	206	258	309	361	413
		PT	.045	.080	.125	.181	.246	.310
		Minimum Distance from Wall - Y	10	12	18	19	22	24
		Maximum Throw - Y	14	18	23	27	32	37
		Minimum Distance from Wall - Z	6	8	10	12	14	16
		Maximum Throw - Z	9	12	15	18	21	24
		NC	24	32	38	43	47	50
12x51	Return	CFM	<b>1275</b>	<b>1700</b>	<b>2125</b>	<b>2550</b>	<b>2975</b>	<b>3400</b>
		PT	.005	.009	.013	.019	.025	.035
		NC	24	32	38	43	47	50
24x36	Supply	CFM Total	<b>960</b>	<b>1280</b>	<b>1600</b>	<b>1920</b>	<b>2240</b>	<b>2560</b>
		CFM Side Y	295	394	492	591	689	788
		CFM Size Z	183	244	305	366	427	488
		PT	.045	.080	.125	.181	.246	.310
		Minimum Distance from Wall - Y	7	10	12	14	17	19
		Maximum Throw - Y	11	14	18	21	25	29
		Minimum Distance from Wall - Z	6	8	10	12	14	16
		Maximum Throw - Z	9	12	15	18	21	24
		NC	23	31	36	41	45	49
15x27	Return	CFM	<b>840</b>	<b>1120</b>	<b>1400</b>	<b>1680</b>	<b>1960</b>	<b>2240</b>
		PT	.005	.009	.013	.019	.025	.035
		NC	23	31	36	41	45	49
24x48	Supply	CFM Total	<b>1182</b>	<b>1576</b>	<b>1970</b>	<b>2364</b>	<b>2785</b>	<b>3152</b>
		CFM Side Y	408	544	680	815	951	1087
		CFM Size Z	183	244	305	366	427	488
		PT	.045	.080	.125	.181	.246	.310
		Minimum Distance from Wall - Y	8	11	14	16	19	22
		Maximum Throw - Y	12	16	20	24	28	32
		Minimum Distance from Wall - Z	6	8	10	12	14	16
		Maximum Throw - Z	9	12	15	18	21	24
		NC	24	32	37	42	48	50
15x39	Return	CFM	<b>1218</b>	<b>1624</b>	<b>2030</b>	<b>2436</b>	<b>2842</b>	<b>3248</b>
		PT	.005	.009	.013	.019	.025	.035
		NC	14	32	37	42	46	50
24x60	Supply	CFM Total	<b>1410</b>	<b>1880</b>	<b>2350</b>	<b>2820</b>	<b>3290</b>	<b>3760</b>
		CFM Side Y	520	695	868	1042	1216	1390
		CFM Size Z	180	245	307	368	429	490
		PT	.045	.080	.125	.181	.246	.310
		Minimum Distance from Wall - Y	10	12	18	19	22	24
		Maximum Throw - Y	14	18	23	27	32	37
		Minimum Distance from Wall - Z	6	8	10	12	14	16
		Maximum Throw - Z	9	12	15	18	21	24
		NC	25	32	38	43	47	50
15x51	Return	CFM	<b>1590</b>	<b>2120</b>	<b>2650</b>	<b>3180</b>	<b>3710</b>	<b>4240</b>
		PT	.005	.009	.013	.019	.025	.035
		NC	25	32	38	43	47	50
27x36	Supply	CFM Total	<b>1014</b>	<b>1352</b>	<b>1690</b>	<b>2028</b>	<b>2366</b>	<b>2704</b>
		CFM Side Y	296	394	493	591	690	788
		CFM Size Z	211	282	352	423	493	564
		PT	.045	.080	.125	.181	.246	.310
		Minimum Distance from Wall - Y	7	10	12	14	17	19
		Maximum Throw - Y	11	14	18	21	25	29
		Minimum Distance from Wall - Z	7	9	11	14	15	18
		Maximum Throw - Z	10	13	16	20	22	26
		NC	23	31	36	41	45	49
18x27	Return	CFM	<b>1011</b>	<b>1348</b>	<b>1685</b>	<b>2022</b>	<b>2359</b>	<b>2696</b>
		PT	.005	.009	.013	.019	.025	.035
		NC	23	31	36	41	45	49

Sq. & Rect. Louvered Diffusers

Neck SIZE		DUCT VELOCITY — FPM						
		300	400	500	600	700	800	
27x48	Supply	CFM Total	1239	1652	2065	2478	2891	3304
		CFM Side Y	408	544	680	816	953	1088
		CFM Size Z	211	282	352	423	493	564
		PT	.045	.080	.125	.181	.246	.310
		Minimum Distance from Wall - Y	8	11	14	16	19	22
		Maximum Throw - Y	12	16	20	24	28	32
		Minimum Distance from Wall - Z	7	9	11	14	15	18
		Maximum Throw - Z	10	13	16	20	22	26
18x39	Return	NC	24	32	37	42	46	50
		CFM	1461	1948	2435	2922	3409	3896
		PT	.005	.009	.013	.019	.025	.035
27x60	Supply	NC	24	32	37	42	46	50
		CFM Total	1464	1952	2440	2928	3416	3904
		CFM Side Y	521	694	868	1041	1215	1388
		CFM Size Z	211	282	352	423	493	564
		PT	.045	.080	.125	.181	.246	.310
		Minimum Distance from Wall - Y	10	12	18	19	22	24
		Maximum Throw - Y	14	18	23	27	32	37
		Minimum Distance from Wall - Z	7	9	11	14	15	18
18x51	Return	Maximum Throw - Z	10	13	16	20	22	26
		NC	25	32	38	43	47	50
		CFM	1911	2548	3185	3822	4459	5096
30x36	Supply	PT	.005	.009	.013	.019	.025	.035
		NC	25	32	38	43	47	50
		CFM Total	1071	1428	1785	2142	2499	2856
		CFM Side Y	296	395	493	591	690	788
		CFM Size Z	239	319	398	480	558	638
		PT	.045	.080	.125	.181	.246	.310
		Minimum Distance from Wall - Y	7	10	12	14	17	19
		Maximum Throw - Y	11	14	18	21	25	29
21x27	Return	Minimum Distance from Wall - Z	7	9	12	14	16	18
		Maximum Throw - Z	10	13	17	20	23	26
		NC	24	31	37	42	46	49
30x48	Supply	CFM	1179	1572	1965	2358	2751	3144
		PT	.005	.009	.013	.019	.025	.035
		NC	24	31	37	42	46	49
		CFM Total	1296	1728	2160	2592	3024	3456
		CFM Side Y	408	544	680	815	951	1087
		CFM Size Z	239	319	398	480	558	638
		PT	.045	.080	.125	.181	.246	.310
		Minimum Distance from Wall - Y	8	11	14	16	19	22
21x39	Return	Maximum Throw - Y	12	16	20	24	28	32
		Minimum Distance from Wall - Z	7	9	12	14	16	18
		Maximum Throw - Z	10	13	17	20	23	26
30x60	Supply	NC	24	32	38	42	46	50
		CFM	1704	2272	2840	3408	3976	4544
		PT	.005	.009	.013	.019	.025	.035
		NC	24	32	38	42	46	50
		CFM Total	1521	2028	2535	3024	3549	4056
		CFM Side Y	521	694	869	1041	1216	1390
		CFM Size Z	239	319	398	480	558	638
		PT	.045	.080	.125	.181	.246	.310
21x51	Return	Minimum Distance from Wall - Y	10	12	18	19	22	24
		Maximum Throw - Y	14	18	23	27	32	37
		Minimum Distance from Wall - Z	7	9	12	14	16	18
33x36	Supply	Maximum Throw - Z	10	13	17	20	23	26
		NC	25	32	38	42	47	51
		CFM	2229	2972	3715	4458	5201	5944
		PT	.005	.009	.013	.019	.025	.035
		NC	25	32	38	42	47	51
		CFM Total	1475	1900	2375	2850	3325	3800
		CFM Side Y	375	500	625	750	875	1000
		CFM Size Z	338	450	563	675	788	900
21x24	Return	PT	.045	.080	.125	.181	.246	.310
		Minimum Distance from Wall - Y	8	11	14	16	18	21
		Maximum Throw - Y	12	16	20	23	27	31
33x42	Supply	Minimum Distance from Wall - Z	7	10	13	15	18	20
		Maximum Throw - Z	11	15	19	22	26	30
		NC	25	32	38	43	47	50
		CFM	1050	1400	1750	2100	2450	2800
		PT	.005	.009	.013	.019	.025	.035
		NC	25	32	38	43	47	50
		CFM Total	1575	2100	2625	3150	3675	4200
		CFM Side Y	450	600	750	900	1050	1200
21x30	Return	CFM Size Z	338	450	563	675	788	900
		PT	.045	.080	.125	.181	.246	.310
		Minimum Distance from Wall - Y	9	12	14	17	20	23
33x42	Supply	Maximum Throw - Y	13	17	21	25	30	34
		Minimum Distance from Wall - Z	7	10	13	15	18	20
		Maximum Throw - Z	11	15	19	22	26	30
		NC	25	33	38	43	47	51
		CFM	1311	1748	2185	2622	3059	3496
		PT	.005	.009	.013	.019	.025	.035
		NC	25	33	38	43	47	51

Sq. & Rect. Louvered Diffusers

Neck SIZE		DUCT VELOCITY — FPM						
		300	400	500	600	700	800	
33x48	Supply	CFM Total	<b>1725</b>	<b>2300</b>	<b>2875</b>	<b>3450</b>	<b>4025</b>	<b>4600</b>
		CFM Side Y	525	700	875	1050	1225	1400
		CFM Size Z	338	450	563	675	788	900
		PT	.045	.080	.125	.181	.246	.310
		Minimum Distance from Wall - Y	10	12	16	19	22	24
		Maximum Throw - Y	14	18	23	28	32	36
		Minimum Distance from Wall - Z	7	10	13	15	18	20
		Maximum Throw - Z	11	15	19	22	26	30
		NC	26	33	39	44	48	51
21x36	Return	CFM	<b>1575</b>	<b>2100</b>	<b>2625</b>	<b>3150</b>	<b>3675</b>	<b>4200</b>
		PT	.005	.009	.013	.019	.025	.035
		NC	26	33	39	44	48	51
33x60	Supply	CFM Total	<b>2025</b>	<b>2700</b>	<b>3375</b>	<b>4050</b>	<b>4725</b>	<b>5400</b>
		CFM Side Y	675	900	1125	1350	1575	1800
		CFM Size Z	338	450	563	675	788	900
		PT	.045	.080	.125	.181	.246	.310
		Minimum Distance from Wall - Y	11	14	18	19	24	28
		Maximum Throw - Y	16	21	26	31	36	42
		Minimum Distance from Wall - Z	7	10	13	15	18	20
		Maximum Throw - Z	11	15	19	22	26	30
		NC	26	34	40	44	48	52
21x48	Return	CFM	<b>2100</b>	<b>2800</b>	<b>3500</b>	<b>4200</b>	<b>4900</b>	<b>5600</b>
		PT	.005	.009	.013	.019	.025	.035
		NC	26	34	40	44	48	52
36x48	Supply	CFM Total	<b>1800</b>	<b>2400</b>	<b>3000</b>	<b>3600</b>	<b>4200</b>	<b>4800</b>
		CFM Side Y	525	700	875	1050	1225	1400
		CFM Size Z	375	500	625	750	875	1000
		PT	.045	.080	.125	.181	.246	.310
		Minimum Distance from Wall - Y	10	12	16	19	22	24
		Maximum Throw - Y	14	18	23	28	32	36
		Minimum Distance from Wall - Z	8	13	14	16	18	21
		Maximum Throw - Z	12	16	20	23	27	31
		NC	26	33	39	44	48	51
24x36	Return	CFM	<b>1800</b>	<b>2400</b>	<b>3000</b>	<b>3600</b>	<b>4200</b>	<b>4800</b>
		PT	.005	.009	.013	.019	.025	.035
		NC	26	33	39	44	48	51
36x60	Supply	CFM Total	<b>2100</b>	<b>2800</b>	<b>3500</b>	<b>4200</b>	<b>4900</b>	<b>5600</b>
		CFM Side Y	675	900	1125	1350	1575	1800
		CFM Size Z	375	500	625	750	875	1000
		PT	.045	.080	.125	.181	.246	.310
		Minimum Distance from Wall - Y	11	14	18	19	24	28
		Maximum Throw - Y	16	21	26	31	36	42
		Minimum Distance from Wall - Z	8	13	14	16	18	21
		Maximum Throw - Z	12	16	23	26	27	31
		NC	27	34	40	44	48	52
24x48	Return	CFM	<b>2400</b>	<b>3200</b>	<b>4000</b>	<b>4800</b>	<b>5600</b>	<b>6400</b>
		PT	.005	.009	.013	.019	.025	.035
		NC	27	34	40	44	48	52
39x48	Supply	CFM Total	<b>1875</b>	<b>2500</b>	<b>3125</b>	<b>3750</b>	<b>4375</b>	<b>5000</b>
		CFM Side Y	525	700	875	1050	1225	1400
		CFM Size Z	413	550	688	825	963	1100
		PT	.045	.080	.125	.181	.246	.310
		Minimum Distance from Wall - Y	10	12	16	19	22	24
		Maximum Throw - Y	14	18	23	28	32	36
		Minimum Distance from Wall - Z	8	11	14	16	19	22
		Maximum Throw - Z	12	16	20	24	29	33
		NC	26	33	39	44	48	52
27x36	Return	CFM	<b>2025</b>	<b>2700</b>	<b>3375</b>	<b>4050</b>	<b>4725</b>	<b>5400</b>
		PT	.005	.009	.013	.019	.025	.035
		NC	26	33	39	44	48	52
39x60	Supply	CFM Total	<b>2175</b>	<b>2900</b>	<b>3625</b>	<b>4350</b>	<b>5075</b>	<b>5800</b>
		CFM Side Y	675	900	1125	1350	1575	1800
		CFM Size Z	413	550	688	825	963	1100
		PT	.045	.080	.125	.181	.246	.310
		Minimum Distance from Wall - Y	11	14	18	19	24	28
		Maximum Throw - Y	16	21	26	31	36	42
		Minimum Distance from Wall - Z	8	11	14	16	19	22
		Maximum Throw - Z	12	16	20	24	29	33
		NC	27	34	40	45	49	52
27x48	Return	CFM	<b>2700</b>	<b>3600</b>	<b>4500</b>	<b>5400</b>	<b>6300</b>	<b>7200</b>
		PT	.005	.009	.013	.019	.025	.035
		NC	27	34	40	45	49	52
42x48	Supply	CFM Total	<b>2346</b>	<b>3128</b>	<b>3910</b>	<b>4692</b>	<b>5474</b>	<b>6256</b>
		CFM Side Y	633	844	1055	1265	1476	1687
		CFM Size Z	539	719	899	1078	1258	1438
		PT	.045	.080	.125	.181	.246	.310
		Minimum Distance from Wall - Y	10	14	17	20	24	27
		Maximum Throw - Y	15	20	25	30	35	40
		Minimum Distance from Wall - Z	10	12	16	19	22	25
		Maximum Throw - Z	14	18	24	28	33	37
		NC	27	35	40	45	49	53
27x33	Return	CFM	<b>1854</b>	<b>2472</b>	<b>3090</b>	<b>3708</b>	<b>4326</b>	<b>4944</b>
		PT	.005	.009	.013	.019	.025	.035
		NC	27	35	40	45	49	53

Sq. & Rect. Louvered Diffusers

Neck SIZE		DUCT VELOCITY — FPM						
		300	400	500	600	700	800	
42x60	Supply	CFM Total	<b>2721</b>	<b>3628</b>	<b>4535</b>	<b>5442</b>	<b>6349</b>	<b>7256</b>
		CFM Side Y	820	1094	1367	1640	1914	2187
		CFM Size Z	539	719	899	1078	1258	1438
		PT	.045	.080	.125	.181	.246	.310
		Minimum Distance from Wall - Y	12	16	20	24	28	32
		Maximum Throw - Y	18	24	30	36	42	47
		Minimum Distance from Wall - Z	10	12	16	19	22	25
		Maximum Throw - Z	14	18	24	28	33	37
		NC	28	35	41	46	50	53
27x45	Return	CFM	<b>2529</b>	<b>3372</b>	<b>4215</b>	<b>5058</b>	<b>5901</b>	<b>6744</b>
		PT	.005	.009	.013	.019	.025	.035
		NC	28	35	41	46	50	53
45x48	Supply	CFM Total	<b>2439</b>	<b>3252</b>	<b>4065</b>	<b>4878</b>	<b>5691</b>	<b>6504</b>
		CFM Side Y	633	844	1055	1265	1476	1687
		CFM Size Z	585	780	975	1170	1365	1560
		PT	.045	.080	.125	.181	.246	.310
		Minimum Distance from Wall - Y	10	14	17	20	24	27
		Maximum Throw - Y	15	20	25	30	35	40
		Minimum Distance from Wall - Z	10	13	16	19	23	26
		Maximum Throw - Z	15	19	24	29	34	38
		NC	27	35	40	45	49	53
30x33	Return	CFM	<b>2061</b>	<b>2748</b>	<b>3435</b>	<b>4122</b>	<b>4809</b>	<b>5496</b>
		PT	.005	.009	.013	.019	.025	.035
		NC	27	35	40	45	49	53
45x60	Supply	CFM Total	<b>2814</b>	<b>3752</b>	<b>4690</b>	<b>5628</b>	<b>6566</b>	<b>7504</b>
		CFM Side Y	820	1094	1367	1640	1914	2187
		CFM Size Z	585	780	975	1170	1365	1560
		PT	.045	.080	.125	.181	.246	.310
		Minimum Distance from Wall - Y	12	16	20	24	28	32
		Maximum Throw - Y	18	24	30	36	42	47
		Minimum Distance from Wall - Z	10	13	16	19	23	26
		Maximum Throw - Z	15	19	24	29	34	38
		NC	28	35	41	46	50	53
30x45	Return	CFM	<b>2811</b>	<b>3748</b>	<b>4685</b>	<b>5622</b>	<b>6559</b>	<b>7496</b>
		PT	.005	.009	.013	.019	.025	.035
		NC	28	35	41	46	50	53
48x60	Supply	CFM Total	<b>2910</b>	<b>3880</b>	<b>4850</b>	<b>5820</b>	<b>6790</b>	<b>7760</b>
		CFM Side Y	820	1094	1367	1640	1914	2187
		CFM Size Z	633	844	1055	1265	1476	1687
		PT	.045	.080	.125	.181	.246	.310
		Minimum Distance from Wall - Y	12	16	20	24	28	32
		Maximum Throw - Y	18	24	30	36	42	47
		Minimum Distance from Wall - Z	10	14	17	20	24	27
		Maximum Throw - Z	15	20	25	30	35	40
		NC	28	35	41	46	50	53
33x45	Return	CFM	<b>3090</b>	<b>4120</b>	<b>5150</b>	<b>6180</b>	<b>7210</b>	<b>8240</b>
		PT	.005	.009	.013	.019	.025	.035
		NC	28	35	41	46	50	53
51x60	Supply	CFM Total	<b>3000</b>	<b>4000</b>	<b>5000</b>	<b>6000</b>	<b>7000</b>	<b>8000</b>
		CFM Side Y	820	1094	1367	1640	1914	2187
		CFM Size Z	680	906	1133	1360	1586	1813
		PT	.045	.080	.125	.181	.246	.310
		Minimum Distance from Wall - Y	12	16	20	24	28	32
		Maximum Throw - Y	18	24	30	36	42	47
		Minimum Distance from Wall - Z	11	14	17	21	25	28
		Maximum Throw - Z	16	21	26	32	37	42
		NC	28	36	41	46	50	54
36x45	Return	CFM	<b>3375</b>	<b>4500</b>	<b>5625</b>	<b>6750</b>	<b>7875</b>	<b>9000</b>
		PT	.005	.009	.013	.019	.025	.035
		NC	28	36	41	46	50	54
54x60	Supply	CFM Total	<b>3600</b>	<b>4800</b>	<b>6000</b>	<b>7200</b>	<b>8400</b>	<b>9600</b>
		CFM Side Y	957	1276	1595	1914	2233	2552
		CFM Size Z	843	1124	1405	1686	1967	2248
		PT	.045	.080	.125	.181	.246	.310
		Minimum Distance from Wall - Y	13	17	22	26	31	35
		Maximum Throw - Y	19	26	33	39	46	52
		Minimum Distance from Wall - Z	12	16	20	24	28	33
		Maximum Throw - Z	18	24	30	36	42	48
		NC	29	36	42	47	51	54
36x42	Return	CFM	<b>3125</b>	<b>4200</b>	<b>5250</b>	<b>6300</b>	<b>7350</b>	<b>8400</b>
		PT	.005	.009	.013	.019	.025	.035
		NC	29	36	42	47	51	54
57x60	Supply	CFM Total	<b>3714</b>	<b>4952</b>	<b>6190</b>	<b>7428</b>	<b>8666</b>	<b>9904</b>
		CFM Side Y	957	1276	1595	1914	2233	2552
		CFM Size Z	900	1200	1500	1800	2100	2400
		PT	.045	.080	.125	.181	.246	.310
		Minimum Distance from Wall - Y	13	17	22	26	33	35
		Maximum Throw - Y	19	26	33	39	49	52
		Minimum Distance from Wall - Z	13	17	21	25	30	34
		Maximum Throw - Z	19	25	31	38	44	50
		NC	29	37	42	47	51	55
39x42	Return	CFM	<b>3411</b>	<b>4548</b>	<b>5685</b>	<b>6822</b>	<b>7959</b>	<b>9096</b>
		PT	.005	.009	.013	.019	.025	.035
		NC	29	37	42	47	51	55

Sq. & Rect. Louvered Diffusers