

Design #20



Core Area Sq. Feet	Nominal Duct Size in Inches	Core Velocity	100	200	300	400	500	600	700	800	900	1000
		Velocity Pressure	0.001	0.002	0.006	0.01	0.016	0.022	0.031	0.04	0.051	0.062
		TP: Total Pressure	0.003	0.014	0.031	0.056	0.09	0.131	0.175	0.225	0.29	0.355
0.2	10x4 6x6	CFM	20	39	59	78	98	118	137	157	176	196
		NC				16	22	28	32	35	38	41
		4-Way, 45° Fixed			4-6-9	5-8-13	6-9-15	8-11-18	9-13-21	10-14-20	11-16-23	12-17-25
		2-Way, 45° Fixed			5-7-11	6-9-15	8-11-18	9-14-22	10-15-21	12-17-25	13-20-32	15-22-35
		1-Way, Straight			6-9-14	8-11-18	9-14-22	11-15-22	12-18-26	14-21-34	16-24-38	16-26-42
0.26	12x4 8x6	CFM	25	49	78	103	127	152	176	206	230	255
		NC			10	17	23	29	33	36	39	42
		4-Way, 45° Fixed		3-4-7	4-5-6	6-9-14	7-10-16	8-12-20	10-13-19	11-15-22	12-17-25	13-20-32
		2-Way, 45° Fixed		3-5-8	5-6-8	7-9-12	8-12-20	10-14-20	11-16-23	13-19-31	14-21-34	16-24-38
		1-Way, Straight		4-5-6	6-8-11	8-11-15	10-14-20	12-17-24	13-20-32	15-23-37	17-26-41	19-28-45
0.3	14x4	CFM	29	59	88	118	147	176	206	235	265	294
		NC			10	18	23	29	33	37	40	43
		4-Way, 45° Fixed		3-4-7	4-5-6	6-8-10	7-10-13	9-12-17	10-14-20	11-16-23	12-18-26	14-21-33
		2-Way, 45° Fixed		3-5-8	5-7-9	7-10-13	9-12-17	10-14-20	12-17-24	13-20-32	16-24-38/	16-24-39
		1-Way, Straight		4-5-6	6-8-11	8-11-16	10-15-21	12-17-25	14-21-34	16-24-38	18-27-43	20-29-47
0.35	16x4 12x5 10x6 8x8	CFM	34	69	103	137	172	206	240	274	309	343
		NC			11	18	24	30	34	38	40	43
		4-Way, 45° Fixed		3-4-7	5-7-11	6-9-15	8-11-18	9-13-21	10-15-21	12-17-24	13-19-31	14-21-34
		2-Way, 45° Fixed		4-6-9	5-8-13	7-10-13	9-13-21	10-15-21	12-17-25	14-21-33	15-23-37	17-26-41
		1-Way, Straight		4-5-6	7-9-12	9-12-17	10-15-21	12-18-26	15-22-35	17-25-40	18-27-44	20-31-49
0.4	18x4 12x6	CFM	39	78	118	157	196	235	274	314	353	392
		NC			12	19	26	31	35	38	41	44
		4-Way, 45° Fixed		3-5-8	5-6-7	6-8-11	8-11-15	9-13-18	11-15-22	12-17-25	13-20-32	15-22-35
		2-Way, 45° Fixed		4-6-9	6-8-10	8-10-14	9-13-18	11-15-22	12-18-26	14-21-34	16-24-38	18-26-42
		1-Way, Straight		5-6-7	7-9-12	9-13-18	11-15-22	13-19-31	15-22-36	17-26-41	19-29-46	21-32-51
0.45	20x4 14x6 10x8	CFM	44	88	132	176	221	265	309	353	397	441
		NC			12	19	27	31	35	39	42	45
		4-Way, 45° Fixed		3-5-8	5-6-8	6-9-15	8-12-19	10-13-19	11-15-22	12-18-26	14-21-33	15-23-37
		2-Way, 45° Fixed		4-6-9	6-8-10	8-12-19	10-13-19	11-16-23	13-19-31	15-22-35	16-24-39	18-27-44
		1-Way, Straight		5-7-11	7-11-17	9-14-22	11-16-23	13-20-32	15-23-37	18-26-42	20-29-47	22-33-53
0.55	24x4 16x6 12x8	CFM	54	108	162	216	270	323	377	431	485	539
		NC			13	20	27	32	36	40	42	45
		4-Way, 45° Fixed	2-3-4	3-5-8	5-7-12	7-10-16	8-12-20	10-14-20	12-17-24	13-19-31	15-22-35	16-24-39
		2-Way, 45° Fixed	2-3-5	6-6-10	6-9-15	8-12-20	10-14-20	12-17-25	14-21-33	15-23-37	17-26-41	19-29-46
		1-Way, Straight	2-4-6	5-7-12	8-11-18	10-13-19	12-17-25	14-21-34	16-24-39	18-27-44	21-31-50	23-35-56
0.62	18x6 10x10	CFM	59	123	181	245	304	363	426	485	549	608
		NC			13	21	28	33	37	40	43	46
		4-Way, 45° Fixed	2-3-4	4-6-9	5-8-13	7-11-17	9-13-21	10-15-21	12-17-24	13-20-32	15-22-36	17-25-40
		2-Way, 45° Fixed	2-3-5	4-6-10	6-9-15	8-12-20	10-16-25	12-17-25	14-21-34	16-24-38	18-27-43	20-29-47
		1-Way, Straight	2-3-6	5-7-12	8-11-18	10-14-20	12-19-30	15-22-35	17-26-41	19-29-46	21-32-51	24-36-57
0.7	30x4 20x6 14x8 12x10	CFM	69	137	206	274	343	412	480	549	617	686
		NC	0	0	14	21	28	33	37	41	43	46
		4-Way, 45° Fixed	2-3-5	4-6-9	5-8-13	7-11-17	9-13-21	10-15-21	12-17-25	14-21-33	15-23-37	17-26-41
		2-Way, 45° Fixed	2-4-6	5-7-11	7-10-16	9-13-20	10-15-21	12-18-26	15-22-35	17-25-40	18-27-44	20-31-49
		1-Way, Straight	3-4-7	5-8-13	8-12-19	10-15-21	12-19-30	15-22-36	18-26-42	20-29-47	22-33-53	25-37-59
0.81	36x4 24x6 16x8 14x10	CFM	78	157	240	319	397	475	554	637	715	794
		NC			15	22	29	34	38	41	44	47
		4-Way, 45° Fixed	2-3-5	4-6-9	6-9-14	8-11-18	9-14-22	11-15-22	12-18-26	14-21-34	16-24-38	18-27-43
		2-Way, 45° Fixed	2-4-6	5-7-11	7-10-16	9-14-22	11-15-22	13-19-31	15-22-36	17-26-41	19-29-46	21-32-51
		1-Way, Straight	3-4-7	5-8-13	8-12-20	11-15-22	13-20-32	16-24-38	18-27-44	20-31-49	23-34-55	26-39-62
0.87	18x8 12x12	CFM	83	172	255	343	426	510	598	681	769	853
		NC			15	22	29	34	38	41	44	47
		4-Way, 45° Fixed	2-3-5	4-6-9	6-9-14	8-12-19	10-13-19	11-16-23	13-19-31	15-22-35	16-24-39	18-27-43
		2-Way, 45° Fixed	2-4-6	5-7-11	7-11-17	9-14-22	11-16-23	13-20-32	15-23-37	18-26-42	20-39-47	22-32-52
		1-Way, Straight	3-4-7	6-9-14	8-12-20	11-15-22	13-20-32	16-24-39	19-28-45	21-31-50	23-35-56	26-39-63

Core Area Sq. Feet	Nominal Duct Size in Inches	Core Velocity	100	200	300	400	500	600	700	800	900	1000
		Velocity Pressure	0.001	0.002	0.006	0.01	0.016	0.022	0.031	0.04	0.051	0.062
		TP: Total Pressure	0.003	0.014	0.031	0.056	0.09	0.131	0.175	0.225	0.29	0.355
1.02	30x6 20x8 16x10 14x12	CFM	98	201	299	402	500	598	701	799	902	1000
		NC			16	23	30	35	39	42	45	48
		4-Way, 45° Fixed	2-3-5	4-6-10	6-9-15	8-12-19	10-14-20	12-17-24	13-20-32	15-22-36	17-26-41	19-28-45
		2-Way, 45° Fixed	2-4-6	5-7-12	7-11-17	10-13-19	12-17-24	14-21-33	16-24-29	18-27-43	20-31-49	23-34-55
		1-Way, Straight	3-4-7	6-9-14	9-13-21	11-17-27	14-21-34	17-25-40	19-29-46	22-32-52	25-37-59	27-41-65
1.15	24x8 18x10 16x12	CFM	113	225	338	451	564	676	789	902	1019	1127
		NC			16	24	31	35	39	43	46	49
		4-Way, 45° Fixed	2-3-5	4-6-10	6-9-15	8-12-20	10-15-21	12-17-25	14-21-33	16-24-38	18-26-42	19-29-46
		2-Way, 45° Fixed	2-4-6	5-7-12	8-11-18	10-13-19	12-17-25	14-21-34	17-25-40	19-28-45	21-31-50	23-35-56
		1-Way, Straight	3-5-8	6-9-15	9-14-22	12-17-24	15-22-35	17-26-41	20-29-47	22-34-54	25-37-60	28-42-68
1.25	36x6 20x10 14x14	CFM	123	245	368	490	613	735	858	980	1098	1225
		NC			16	24	31	36	40	43	46	49
		4-Way, 45° Fixed	2-3-5	4-5-6	6-8-11	8-12-20	10-15-21	12-17-25	14-21-34	16-24-38	18-27-43	20-29-47
		2-Way, 45° Fixed	2-4-6	5-6-8	8-10-14	10-14-20	12-18-26	15-22-35	17-26-41	19-29-46	21-32-51	24-26-57
		1-Way, Straight	3-5-8	6-8-11	9-13-18	12-17-25	15-22-35	18-26-42	20-30-48	23-34-55	26-39-62	29-43-69
1.35	16x14 18x12	CFM	132	265	397	529	662	794	926	1058	1196	1323
		NC			17	24	31	36	40	43	46	49
		4-Way, 45° Fixed	2-4-6	4-5-6	7-10-16	9-13-21	10-15-21	12-18-26	15-22-35	16-24-39	18-27-43	20-30-48
		2-Way, 45° Fixed	3-4-7	5-7-9	8-12-19	10-15-21	12-18-26	15-22-36	18-26-42	20-29-47	22-33-53	25-37-59
		1-Way, Straight	3-5-8	6-8-11	10-13-19	12-17-25	15-22-36	18-27-43	21-31-50	23-35-56	26-39-63	29-44-70
1.53	30x8 24x10 20x12 18x14 16x16	CFM	152	299	451	598	750	902	1049	1196	1352	1499
		NC			17	26	32	37	41	44	47	50
		4-Way, 45° Fixed	2-4-6	5-6-7	7-10-16	9-13-21	11-15-22	13-19-31	15-22-36	17-25-40	19-28-45	21-31-50
		2-Way, 45° Fixed	3-4-7	5-7-9	8-12-19	10-15-21	13-20-32	15-23-37	18-27-43	20-30-48	23-34-55	25-37-60
		1-Way, Straight	3-5-8	7-9-12	10-13-19	12-18-26	15-23-37	18-27-44	21-32-51	24-26-58	27-41-65	30-46-73
1.82	36x8 30x10 24x12 20x14 18x16	CFM	178	358	534	715	892	1068	1245	1431	1607	1784
		NC			18	27	33	37	41	45	48	51
		4-Way, 45° Fixed	2-4-6	5-6-7	7-11-17	9-14-22	11-16-23	13-20-32	15-23-37	18-26-42	20-29-47	22-33-53
		2-Way, 45° Fixed	3-4-7	6-8-10	8-12-20	11-16-23	14-21-33	16-24-29	19-28-45	21-31-50	24-36-57	26-39-63
		1-Way, Straight	3-5-8	7-9-12	10-14-20	13-20-32	16-24-39	19-29-46	22-34-54	25-37-60	29-42-68	32-48-76
2.1	24x14 30x16 18x18	CFM	206	412	617	823	1029	1235	1441	1646	1852	2058
		NC	0	0	19	27	33	38	42	45	48	51
		4-Way, 45° Fixed	2-4-6	5-6-8	8-11-18	10-13-19	12-17-24	14-21-34	16-24-39	18-27-44	20-31-49	23-34-55
		2-Way, 45° Fixed	3-4-7	6-8-10	9-13-21	12-17-24	14-21-34	17-25-40	19-29-46	22-32-52	25-37-59	28-41-66
		1-Way, Straight	4-6-9	7-10-13	10-15-21	14-21-33	17-25-40	20-30-48	23-34-55	26-39-62	29-44-70	33-50-80
2.35	36x10 30x12 24x16 20x18	CFM	230	461	691	921	1156	1382	1607	1842	2078	2303
		NC			19	28	34	38	42	46	49	52
		4-Way, 45° Fixed	2-4-6	5-6-8	8-11-18	10-14-20	12-17-25	15-22-35	17-25-40	19-28-45	21-31-50	24-36-57
		2-Way, 45° Fixed	3-5-8	6-8-11	9-14-22	12-17-24	15-22-35	18-26-42	20-30-48	22-34-54	25-38-61	28-42-68
		1-Way, Straight	4-6-9	7-10-13	11-15-22	14-21-33	18-26-42	20-31-49	24-36-57	27-40-64	30-45-72	34-51-82
2.68	36x12 30x14 24x18 20x20	CFM	265	524	789	1049	1313	1578	1842	2097	2362	2626
		NC			20	28	34	39	43	46	49	52
		4-Way, 45° Fixed	3-4-7	5-7-9	8-12-19	10-15-21	12-18-26	15-22-36	18-26-42	20-29-47	22-32-52	25-37-59
		2-Way, 45° Fixed	3-5-8	6-8-11	9-14-22	12-17-25	15-22-36	20-30-48	20-31-49	23-35-56	26-39-62	29-44-70
		1-Way, Straight	4-6-9	8-10-14	11-16-23	15-22-35	18-27-43	21-32-51	25-37-59	28-41-66	31-47-75	35-53-85
3.15	36x16 30x18 24x24	CFM	309	617	926	1235	1548	1852	2156	2470	2783	3087
		NC		10	20	29	35	40	44	47	50	53
		4-Way, 45° Fixed	3-4-7	5-7-9	8-12-19	11-15-22	13-19-31	15-23-37	18-27-43	20-31-49	23-34-55	26-39-62
		2-Way, 45° Fixed	3-5-8	7-9-12	10-14-20	12-18-26	16-24-38	19-28-45	21-32-51	24-36-58	27-41-65	30-46-73
		1-Way, Straight	4-5-6	8-11-15	12-17-24	15-22-36	19-28-45	22-3-53	26-39-62	29-43-69	33-49-79	37-56-89
3.65	36x18 30x20	CFM	358	715	1078	1431	1784	2146	2509	2862	3214	3577
		NC		11	21	30	36	40	44	48	51	54
		4-Way, 45° Fixed	3-4-7	5-7-9	8-12-19	11-15-22	13-19-31	15-23-37	18-27-43	21-31-50	24-36-57	27-40-64
		2-Way, 45° Fixed	3-5-8	7-9-12	10-14-20	12-18-26	16-24-38	19-28-45	21-32-51	25-37-60	28-42-68	32-48-76
		1-Way, Straight	4-5-6	8-11-15	12-17-24	15-22-36	19-28-45	22-33-53	26-39-62	30-45-72	34-51-83	38-57-92

CFM: Cubic Feet per Minute

*All pressures are in inches of water.

Page #2 of 2

FPM: Feet per Minute

* Blank areas denote NC values less than 10 and CFM values less than 50.

TP: Total Pressure, inches w.g.

*Throw values are measured in feet for terminal velocities of 150/100/50 FPM.

T: Throw in feet

*Throw values are based on fixed louvers set at 45 degrees.

NC: Noise Criteria

* Throw may be increased or decreased by as much as 20% by changing angle of louver.