



SF1 AND SF2 SUPPLY WITH NO EXTRACTOR

SU1 AND SU2 SUPPLY WITH NO EXTRACTOR

Nominal Duct Size (in.)	Nominal Duct Area (sq. ft.)	Core Area (sq. ft.)	Core Velocity (fpm)		300	400	500	600	700	800	1000	1200	
			Velocity Pressure (In. w.g.)		0.006	0.010	0.016	0.022	0.031	0.040	0.062	0.090	
			Total Pressure (in. w.g.)	0°	0.017	0.031	0.048	0.069	0.094	0.123	0.192	0.277	
10 x 3	0.21	0.14		22.5°	0.023	0.041	0.064	0.092	0.125	0.163	0.255	0.368	
					45°	0.033	0.060	0.093	0.134	0.182	0.238	0.372	0.536
			Air Flow (cfm)		42	56	70	84	98	112	140	168	
			NC (dB)		--	--	--	19	24	28	35	40	
10 x 3	0.21	0.14	Throw (ft.)	0°	3 - 5 - 9	4 - 6 - 10	5 - 8 - 11	6 - 9 - 12	7 - 9 - 13	8 - 10 - 14	9 - 11 - 16	10 - 12 - 17	
				22.5°	2 - 4 - 7	3 - 5 - 8	4 - 6 - 9	5 - 7 - 9	6 - 7 - 10	6 - 8 - 11	7 - 9 - 12	8 - 9 - 13	
				45°	1 - 2 - 4	2 - 3 - 4	2 - 3 - 5	3 - 4 - 5	3 - 4 - 6	4 - 4 - 6	4 - 5 - 7	4 - 5 - 8	
				Air Flow (cfm)		51	68	85	102	119	136	170	204
12 x 3	0.25	0.17	22.5°	0.023	0.041	0.064	0.092	0.125	0.163	0.255	0.368		
				45°	0.033	0.060	0.093	0.134	0.182	0.238	0.372	0.536	
				Air Flow (cfm)		51	68	85	102	119	136	170	204
				NC (dB)		--	--	--	15	21	24	31	37
12 x 3	0.25	0.17	Throw (ft.)	0°	5 - 7 - 9	6 - 8 - 11	6 - 9 - 12	8 - 9 - 13	7 - 9 - 14	9 - 11 - 15	10 - 12 - 17	11 - 13 - 19	
				22.5°	4 - 5 - 7	5 - 6 - 8	5 - 7 - 9	6 - 7 - 10	6 - 8 - 12	7 - 8 - 12	8 - 9 - 12	8 - 10 - 15	
				45°	2 - 3 - 4	3 - 3 - 5	3 - 4 - 5	3 - 4 - 6	4 - 5 - 7	4 - 5 - 7	4 - 5 - 8	5 - 6 - 9	
				Air Flow (cfm)		63	84	105	126	147	168	210	252
10 x 4 14 x 3	0.28	0.21	22.5°	0.023	0.041	0.064	0.092	0.125	0.163	0.255	0.368		
				45°	0.033	0.060	0.093	0.134	0.182	0.238	0.372	0.536	
				Air Flow (cfm)		63	84	105	126	147	168	210	252
				NC (dB)		--	--	15	21	25	29	36	42
10 x 4 14 x 3	0.28	0.21	Throw (ft.)	0°	3 - 6 - 10	5 - 7 - 12	6 - 9 - 13	7 - 10 - 15	9 - 11 - 16	10 - 12 - 17	11 - 13 - 19	12 - 15 - 21	
				22.5°	3 - 4 - 8	4 - 6 - 9	5 - 7 - 10	6 - 8 - 11	7 - 9 - 12	8 - 9 - 13	8 - 10 - 15	9 - 11 - 16	
				45°	2 - 2 - 5	2 - 3 - 5	3 - 4 - 6	3 - 5 - 7	4 - 5 - 7	4 - 5 - 8	5 - 6 - 8	5 - 7 - 9	
				Air Flow (cfm)		75	100	125	150	175	200	250	300
12 x 4	0.33	0.25	22.5°	0.023	0.041	0.064	0.092	0.125	0.163	0.255	0.368		
				45°	0.033	0.060	0.093	0.134	0.182	0.238	0.372	0.536	
				Air Flow (cfm)		75	100	125	150	175	200	250	300
				NC (dB)		--	--	13	19	23	26	34	40
12 x 4	0.33	0.25	Throw (ft.)	0°	5 - 8 - 11	7 - 9 - 13	8 - 10 - 14	9 - 11 - 16	10 - 12 - 17	11 - 13 - 18	12 - 14 - 20	13 - 16 - 22	
				22.5°	4 - 6 - 9	6 - 7 - 10	6 - 8 - 11	7 - 9 - 12	8 - 9 - 13	8 - 10 - 14	9 - 11 - 16	10 - 12 - 17	
				45°	2 - 4 - 5	3 - 4 - 6	4 - 5 - 6	4 - 5 - 7	4 - 5 - 8	5 - 6 - 8	5 - 6 - 9	6 - 7 - 10	
				Air Flow (cfm)		90	120	150	180	210	240	300	360
10 x 6 14 x 4 16 x 4	0.42	0.30	22.5°	0.023	0.041	0.064	0.092	0.125	0.163	0.255	0.368		
				45°	0.033	0.060	0.093	0.134	0.182	0.238	0.372	0.536	
				Air Flow (cfm)		90	120	150	180	210	240	300	360
				NC (dB)		--	--	17	23	27	31	35	41
10 x 6 14 x 4 16 x 4	0.42	0.30	Throw (ft.)	0°	4 - 7 - 13	6 - 9 - 15	8 - 12 - 17	9 - 13 - 18	11 - 14 - 20	12 - 15 - 21	13 - 16 - 23	14 - 18 - 25	
				22.5°	3 - 5 - 10	5 - 7 - 12	6 - 9 - 13	7 - 10 - 14	8 - 11 - 15	10 - 12 - 17	10 - 12 - 18	11 - 14 - 19	
				45°	2 - 3 - 6	3 - 4 - 7	4 - 5 - 8	4 - 6 - 8	5 - 6 - 9	6 - 7 - 10	6 - 7 - 10	7 - 8 - 11	
				Air Flow (cfm)		117	156	195	234	273	312	390	468
12 x 6 18 x 4	0.50	0.39	22.5°	0.023	0.041	0.064	0.092	0.125	0.163	0.255	0.368		
				45°	0.033	0.060	0.093	0.134	0.182	0.238	0.372	0.536	
				Air Flow (cfm)		117	156	195	234	273	312	390	468
				NC (dB)		--	--	--	18	23	27	33	39
12 x 6 18 x 4	0.50	0.39	Throw (ft.)	0°	6 - 9 - 18	8 - 13 - 24	10 - 16 - 26	13 - 19 - 29	15 - 22 - 31	17 - 24 - 33	21 - 26 - 37	24 - 29 - 41	
				22.5°	5 - 8 - 15	7 - 10 - 19	8 - 13 - 21	10 - 15 - 23	12 - 18 - 25	13 - 19 - 27	17 - 21 - 30	19 - 23 - 33	
				45°	3 - 5 - 9	4 - 6 - 12	5 - 8 - 13	6 - 9 - 14	7 - 11 - 16	8 - 12 - 17	10 - 13 - 19	12 - 14 - 20	
				Air Flow (cfm)		129	172	215	258	301	344	430	516
10 x 8 14 x 6 20 x 4	0.56	0.43	22.5°	0.023	0.041	0.064	0.092	0.125	0.163	0.255	0.368		
				45°	0.033	0.060	0.093	0.134	0.182	0.238	0.372	0.536	
				Air Flow (cfm)		129	172	215	258	301	344	430	516
				NC (dB)		--	--	19	24	29	33	36	40
10 x 8 14 x 6 20 x 4	0.56	0.43	Throw (ft.)	0°	7 - 10 - 15	9 - 11 - 16	10 - 13 - 18	11 - 14 - 20	12 - 15 - 21	13 - 16 - 23	15 - 18 - 25	16 - 20 - 28	
				22.5°	5 - 8 - 11	7 - 9 - 12	8 - 10 - 14	9 - 11 - 15	10 - 12 - 16	10 - 12 - 18	11 - 14 - 20	12 - 15 - 22	
				45°	3 - 5 - 7	4 - 5 - 7	5 - 6 - 8	5 - 6 - 9	6 - 7 - 10	6 - 8 - 11	7 - 8 - 11	8 - 9 - 13	
				Air Flow (cfm)		153	204	255	306	357	408	510	612
10 x 10 12 x 8 16 x 6 24 x 4	0.67	0.51	22.5°	0.023	0.041	0.064	0.092	0.125	0.163	0.255	0.368		
				45°	0.033	0.060	0.093	0.134	0.182	0.238	0.372	0.536	
				Air Flow (cfm)		153	204	255	306	357	408	510	612
				NC (dB)		--	--	--	20	24	28	35	40
10 x 10 12 x 8 16 x 6 24 x 4	0.67	0.51	Throw (ft.)	0°	8 - 11 - 16	11 - 13 - 19	12 - 15 - 21	13 - 16 - 23	14 - 17 - 25	15 - 19 - 26	17 - 21 - 29	19 - 23 - 32	
				22.5°	6 - 9 - 12	8 - 10 - 14	9 - 11 - 16	10 - 12 - 18	11 - 13 - 19	12 - 14 - 20	13 - 16 - 23	14 - 18 - 25	
				45°	3 - 5 - 7	5 - 6 - 8	5 - 7 - 9	6 - 7 - 10	6 - 8 - 11	7 - 8 - 12	8 - 9 - 13	8 - 10 - 14	
				Air Flow (cfm)		180	240	300	360	420	480	600	720
14 x 8 18 x 6	0.75	0.60	22.5°	0.023	0.041	0.064	0.092	0.125	0.163	0.255	0.368		
				45°	0.033	0.060	0.093	0.134	0.182	0.238	0.372	0.536	
				Air Flow (cfm)		180	240	300	360	420	480	600	720
				NC (dB)		--	--	15	20	25	29	35	41
14 x 8 18 x 6	0.75	0.60	Throw (ft.)	0°	8 - 12 - 17	11 - 14 - 20	13 - 16 - 22	14 - 17 - 24	15 - 18 - 26	16 - 20 - 28	18 - 22 - 31	20 - 24 - 34	
				22.5°	6 - 9 - 13	9 - 11 - 15	10 - 12 - 17	11 - 13 - 19	12 - 14 - 20	13 - 15 - 22	14 - 17 - 24	15 - 19 - 27	
				45°	4 - 5 - 8	5 - 6 - 9	6 - 7 - 10	6 - 8 - 11	7 - 8 - 12	7 - 9 - 13	8 - 10 - 14	9 - 11 - 16	
				Air Flow (cfm)		201	268	335	402	469	536	670	804
10 x 12 12 x 10 16 x 8 20 x 6 30 x 4	0.83	0.67	22.5°	0.023	0.041	0.064	0.092	0.125	0.163	0.255	0.368		
				45°	0.033	0.060	0.093	0.134	0.182	0.238	0.372	0.536	
				Air Flow (cfm)		201	268	335	402	469	536	670	804
				NC (dB)		--	--	15	21	25	29	36	41
10 x 12 12 x 10 16 x 8 20 x 6 30 x 4	0.83	0.67	Throw (ft.)	0°	6 - 10 - 18	9 - 13 - 21	11 - 16 - 24	13 - 18 - 26	15 - 20 - 28	17 - 21 - 30	19 - 24 - 32	21 - 26 - 33	
				22.5°	5 - 8 - 14	7 - 10 - 16	9 - 13 - 18	10 - 14 - 20	12 - 15 - 22	13 - 16 - 23	15 - 18 - 26	16 - 20 - 28	
				45°	3 - 4 - 8	4 - 6 - 10	5 - 7 - 11	6 - 8 - 12	7 - 9 - 13	8 - 10 - 14	9 - 11 - 15	9 - 12 - 16	
				Air Flow (cfm)		240	320	400	480	560	640	800	960
12 x 12 14 x 10 18 x 8 24 x 6 36 x 4	1.00	0.80	22.5°	0.023	0.041	0.064	0.092	0.125	0.163	0.255	0.368		
				45°	0.033	0.060	0.093	0.134	0.182	0.238	0.372	0.536	
				Air Flow (cfm)		240	320	400	480	560	640	800	960
				NC (dB)		--	--	16	22	26	30	37	43
12 x 12 14 x 10 18 x 8 24 x 6 36 x 4	1.00	0.80	Throw (ft.)	0°	7 - 11 - 20	10 - 14 - 23	12 - 18 - 26	14 - 20 - 28	17 - 22 - 31	19 - 23 - 33	21 - 26 - 37	23 - 28 - 40	
				22.5°	5 - 8 - 16	7 - 11 - 18	9 - 14 - 20	11 - 16 - 22	13 - 17 - 24	15 - 18 - 25	16 - 20 - 28	18 - 21 - 30	
				45°	3 - 5 - 9	4 - 6 - 10	5 - 8 - 12	6 - 9 - 13	8 - 10 - 14	9 - 10 - 15	10 - 12 - 16	12 - 13 - 18	
				Air Flow (cfm)		273	364	455	546	637	728	910	1092
14 x 12 16 x 10 20 x 8	1.11	0.91	22.5°	0.023	0.041	0.064	0.092	0.125	0.163	0.255	0.368		
				45°	0.033	0.060	0.093	0.134	0.182	0.238	0.372	0.536	
				Air Flow (cfm)		273	364	455	546	637	728	910	1092
				NC (dB)		--	--	--	18	23	27	34	39
14 x 12 16 x 10 20 x 8	1.11	0.91	Throw (ft.)	0°	10 - 14 - 29	13 - 19 - 36	16 - 24 - 40	19 - 29 - 44	22 - 33 - 47	25 - 36 - 51	32 - 40 - 57	36 - 44 - 62	
				22.5°	8 - 11 - 23	10 - 15 - 29	13 - 19 - 32	15 - 23 - 35	18 - 27 - 38	20 - 29 - 40	25 - 32 - 45	29 - 35 - 50	
				45°	5 - 7 - 14	6 - 10 - 18	8 - 12 - 20	10 - 14 - 22	11 - 17 - 24	13 - 18 -			

Nominal Duct Size (in.)	Nominal Duct Area (sq. ft.)	Core Area (sq. ft.)	Core Velocity (fpm)							300	400	500	600	700	800	1000	1200	
			Velocity Pressure (in. w.g.)							0.006	0.010	0.016	0.022	0.031	0.040	0.062	0.090	
			Total Pressure (in. w.g.)	0°							0.017	0.031	0.048	0.069	0.094	0.123	0.192	0.277
22.5°							0.023	0.041	0.064	0.092	0.125	0.163	0.255	0.368				
45°							0.033	0.060	0.093	0.134	0.182	0.238	0.372	0.536				
18 x 12 20 x 10 36 x 6	1.50	1.34	Air Flow (cfm)							402	536	670	804	938	1072	1340	1608	
			NC (dB)							--	--	18	24	28	32	39	44	
			Throw (ft.)	0°							12-18-26	17-21-30	19-24-33	21-26-37	23-28-40	24-30-42	27-33-47	30-37-52
				22.5°							10-14-20	13-16-23	15-18-26	16-20-28	18-22-31	19-23-33	21-26-37	23-28-40
				45°							6-8-12	8-10-13	9-11-15	10-12-16	10-13-18	11-13-19	12-15-21	13-16-23
20 x 12 24 x 10 30 x 8	1.67	1.47	Air Flow (cfm)							441	588	735	882	1029	1178	1470	1764	
			NC (dB)							--	--	19	24	29	33	39	45	
			Throw (ft.)	0°							13-19-27	18-22-31	20-25-35	22-27-38	24-29-42	26-31-44	29-35-50	31-38-54
				22.5°							10-15-21	14-17-24	16-19-27	17-21-30	19-23-32	20-24-34	22-27-38	26-32-46
				45°							6-9-12	8-10-14	9-11-16	10-12-17	11-13-19	12-14-20	13-16-22	14-17-24
24 x 12 30 x 10 36 x 8	2.00	1.78	Air Flow (cfm)							534	712	890	1068	1246	1424	1780	2136	
			NC (dB)							--	--	19	25	30	34	40	46	
			Throw (ft.)	0°							14-20-41	18-27-51	23-34-57	27-41-62	32-47-67	36-51-72	45-57-80	51-62-88
				22.5°							11-16-32	14-22-40	18-27-45	22-32-50	25-38-54	29-40-57	36-45-64	40-50-70
				45°							7-10-20	9-14-25	11-17-28	14-20-31	16-24-33	18-25-36	23-28-40	25-31-44
30 x 12 36 x 10	2.50	2.28	Air Flow (cfm)							684	912	1140	1368	1596	1824	2280	2736	
			NC (dB)							--	16	20	24	29	33	40	46	
			Throw (ft.)	0°							16-24-34	22-28-39	25-31-44	28-34-48	30-36-52	32-39-55	36-44-62	39-49-67
				22.5°							12-18-26	17-21-30	19-24-34	21-26-37	23-28-40	25-30-43	28-34-48	30-37-52
				45°							7-11-15	10-12-18	11-14-20	12-15-21	13-16-23	14-18-25	16-20-28	19-23-33
36 x 12	3.00	2.71	Air Flow (cfm)							813	1084	1355	1626	1897	2168	2710	3252	
			NC (dB)							--	15	21	27	31	35	42	47	
			Throw (ft.)	0°							18-26-37	25-30-43	28-34-48	30-37-52	33-40-56	35-43-60	39-48-67	43-52-74
				22.5°							14-20-29	19-23-33	21-26-37	23-29-41	25-31-44	27-33-47	30-37-52	33-41-57
				45°							8-12-17	11-14-19	12-15-21	14-17-24	15-18-25	16-19-27	18-21-30	19-24-33

- 1) Performance is based on direct duct mount grille, perpendicular to airflow with no ceiling effect less scoop and OBD.
- 2) Throw data is given for isothermal conditions.
- 3) Terminal velocities are listed for 150, 100 and 50 FPM.

- 4) NC valves are based on room absorption of 10 dB re 10⁻¹²
- 5) Blanks "--" indicate NC valve of less than 15 dB.
- 6) 0°, 22.5° and 45° represents the blade angle