

PERFORMANCE DATA

SDG/SDGE

Core Area	Core Velocity (fpm)		300	400	500	600	700	800	1000	1200
	Velocity Pressure (in. w.g.)		0.006	0.01	0.016	0.022	0.031	0.04	0.062	0.09
	Total Pressure (in. w.g.)	0°	0.017	0.031	0.048	0.069	0.094	0.123	0.192	0.277
	Total Pressure (in. w.g.)	22.5°	0.022	0.039	0.061	0.088	0.119	0.156	0.244	0.351
		45°	0.033	0.06	0.093	0.134	0.182	0.238	0.372	0.536
Ac = 0.22 ft. ² 10 x 4	Flow Rate (cfm)		66	88	110	132	154	176	220	264
	Sound (NC)	0°	-	-	-	-	16	21	27	33
	Throw (ft)	0°	5-7-14	6-9-18	8-12-20	9-14-22	11-17-23	13-18-25	16-20-28	18-22-31
22°		4-6-11	5-8-14	6-9-16	8-11-17	9-13-19	10-14-20	13-16-22	14-17-25	
45°		2-4-07	3-5-9	4-6-10	5-7-11	6-8-12	6-9-13	8-10-14	9-11-15	
Ac = 0.26 ft. ² 12 x 4 10 x 5	Flow Rate (cfm)		78	104	130	156	182	208	260	312
	Sound (NC)	0°	-	-	-	-	17	21	28	34
	Throw (ft)	0°	5-8-15	7-10-19	9-13-21	10-15-24	12-18-25	14-19-27	17-21-30	19-24-33
22°		4-6-12	5-8-15	7-10-17	8-12-19	10-14-20	11-15-22	14-17-24	15-19-27	
45°		3-4-8	3-5-10	4-6-11	5-8-12	6-9-13	7-10-14	9-11-15	10-12-17	
Ac = 0.30 ft. ² 14 x 4	Flow Rate (cfm)		90	120	150	180	210	240	300	360
	Sound (NC)	0°	-	-	-	-	18	22	29	34
	Throw (ft)	0°	6-8-17	7-11-21	9-14-23	11-17-25	13-19-27	15-21-29	18-23-33	21-25-36
22°		4-7-13	6-9-17	7-11-18	9-13-20	10-15-22	12-17-23	15-18-26	17-20-29	
45°		3-4-8	4-6-10	5-7-12	6-8-13	6-10-14	7-10-15	9-12-16	10-13-18	
Ac = 0.34 ft. ² 16 x 4 12 x 5 10 x 6	Flow Rate (cfm)		102	136	170	204	238	272	340	408
	Sound (NC)	0°	-	-	-	-	18	22	29	35
	Throw (ft)	0°	6-9-18	8-12-22	10-15-25	12-18-27	14-21-29	16-22-31	20-25-35	22-27-38
22°		5-7-14	6-9-18	8-12-20	9-14-22	11-16-23	13-18-25	16-20-28	18-22-30	
45°		3-4-9	4-6-11	5-7-12	6-9-13	7-10-15	08-11-16	10-12-17	11-13-19	
Ac = 0.39 ft. ² 18 x 4 14 x 5 12 x 6	Flow Rate (cfm)		117	156	195	234	273	312	390	468
	Sound (NC)	0°	-	-	-	-	19	23	30	36
	Throw (ft)	0°	6-9-19	8-13-24	10-16-26	13-19-29	15-22-31	17-24-33	21-26-37	24-29-41
22°		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	
Ac = 0.46 ft. ² 20 x 4 16 x 5 14 x 6 10 x 8	Flow Rate (cfm)		138	184	230	276	322	368	460	552
	Sound (NC)	0°	-	-	-	-	20	24	31	36
	Throw (ft)	0°	7-10-21	9-14-26	11-17-29	14-21-31	16-24-34	18-26-36	23-29-40	26-31-44
22°		5-8-16	7-11-20	9-14-23	11-16-25	13-19-27	15-20-29	18-23-32	20-25-35	
45°		3-5-10	5-7-13	6-9-14	7-10-16	8-12-17	9-13-18	11-14-20	13-16-22	
Ac = 0.52 ft. ² 24 x 4 18 x 5 16 x 6	Flow Rate (cfm)		156	208	260	312	364	416	520	624
	Sound (NC)	0°	-	-	-	15	20	24	31	37
	Throw (ft)	0°	7-11-22	10-15-27	12-18-30	15-22-33	17-25-36	19-27-38	24-30-43	27-33-47
22°		6-9-17	8-12-22	10-15-24	12-17-27	14-20-29	16-22-31	19-24-34	22-27-38	
45°		4-5-11	5-7-14	6-9-15	7-11-17	8-13-18	10-14-19	12-15-21	14-17-24	
Ac = 0.60 ft. ² 24 x 4 20 x 5 18 x 6 12 x 8 10 x 10	Flow Rate (cfm)		180	240	300	360	420	480	600	720
	Sound (NC)	0°	-	-	-	16	21	25	32	37
	Throw (ft)	0°	8-12-23	10-16-29	13-20-33	16-23-36	18-27-39	21-29-41	26-33-46	29-36-51
22°		6-9-19	8-12-23	10-16-26	12-19-29	15-22-31	17-23-33	21-26-37	23-29-40	
45°		4-6-12	5-8-15	7-10-16	8-12-18	9-14-19	10-15-21	13-16-23	15-18-25	

For performance notes see end of section.

PERFORMANCE DATA

SDG/SDGE

Core Area	Core Velocity (fpm)		300	400	500	600	700	800	1000	1200
	Velocity Pressure (in. w.g.)		0.006	0.01	0.016	0.022	0.031	0.04	0.062	0.09
	Total Pressure (in. w.g.)	0°	0.017	0.031	0.048	0.069	0.094	0.123	0.192	0.277
22.5°		0.022	0.039	0.061	0.088	0.119	0.156	0.244	0.351	
45°		0.033	0.06	0.093	0.134	0.182	0.238	0.372	0.536	
Ac = 0.69 ft. ² 30 x 4 24 x 5 20 x 6 14 x 8 12 x 10	Flow Rate (cfm)		207	276	345	414	483	552	690	828
	Sound (NC)	0°	-	-	-	17	21	26	32	38
	Throw (ft)	0°	8-13-25	11-17-31	14-21-35	17-25-38	20-29-41	22-31-44	28-35-50	31-38-54
22°		7-10-20	9-13-25	11-17-28	13-20-31	16-23-33	18-25-35	22-28-40	25-31-43	
45°		4-06-13	6-8-16	7-10-18	8-13-19	10-15-21	11-16-22	14-18-25	16-19-27	
Ac = 0.81 ft. ² 36 x 4 28 x 5 22 x 6 16 x 8 14 x 10	Flow Rate (cfm)		243	324	405	486	567	648	810	972
	Sound (NC)	0°	-	-	-	17	22	26	33	39
	Throw (ft)	0°	9-14-27	12-18-34	15-23-38	18-27-42	21-32-45	24-34-48	30-38-54	34-42-59
22°		7-11-22	10-15-27	12-18-30	15-22-33	17-25-36	19-27-38	24-30-43	27-33-47	
45°		5-7-14	6-9-17	8-11-19	9-14-21	11-16-22	12-17-24	15-19-27	17-21-29	
Ac = 0.90 ft. ² 30 x 5 26 x 6 18 x 8 16 x 10 12 x 12	Flow Rate (cfm)		270	360	450	540	630	720	900	1,080
	Sound (NC)	0°	-	-	-	18	23	27	34	39
	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°		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	13-18-25	16-20-28	18-22-31	
Ac = 1.07 ft. ² 36 x 5 30 x 6 22 x 8 18 x 10 14 x 12	Flow Rate (cfm)		321	428	535	642	749	856	1,070	1,284
	Sound (NC)	0°	-	-	-	19	23	28	34	40
	Throw (ft)	0°	10-16-31	14-21-39	17-26-44	21-31-48	24-36-52	28-39-55	35-44-62	39-48-68
22°		8-13-25	11-17-31	14-21-35	17-25-38	19-29-41	22-31-44	28-35-49	31-38-54	
45°		5-8-16	7-10-20	9-13-22	10-16-24	12-18-26	14-20-28	17-22-31	20-24-34	
Ac = 1.18 ft. ² 34 x 6 24 x 8 20 x 10 16 x 12	Flow Rate (cfm)		354	472	590	708	826	944	1,180	1,416
	Sound (NC)	0°	-	-	-	19	24	28	35	40
	Throw (ft)	0°	11-16-33	15-22-41	18-27-46	22-33-50	26-38-54	29-41-58	36-46-65	41-50-71
22°		9-13-26	12-18-33	15-22-37	18-26-40	20-31-43	23-33-46	29-37-52	33-40-57	
45°		5-8-16	7-11-20	9-14-23	11-16-25	13-19-27	15-20-29	18-23-32	20-25-35	
Ac = 1.34 ft. ² 28 x 8 22 x 10 18 x 12	Flow Rate (cfm)		402	536	670	804	938	1,072	1,340	1,608
	Sound (NC)	0°	-	-	-	20	24	29	35	41
	Throw (ft)	0°	12-18-35	16-23-44	19-29-49	23-35-53	27-41-58	31-44-62	39-49-69	44-53-76
22°		9-14-28	12-19-35	16-23-39	19-28-43	22-33-46	25-35-49	31-39-55	35-43-60	
45°		6-9-18	8-12-22	10-15-24	12-18-27	14-20-29	16-22-31	19-24-35	22-27-38	
Ac = 1.60 ft. ² 32 x 8 26 x 10 22 x 12	Flow Rate (cfm)		480	640	800	960	1,120	1,280	1,600	1,920
	Sound (NC)	0°	-	-	-	20	25	29	36	42
	Throw (ft)	0°	13-19-38	17-25-48	21-32-53	25-38-58	30-45-63	34-48-67	42-53-75	48-58-83
22°		10-15-31	14-20-38	17-25-43	20-31-47	24-36-50	27-38-54	34-43-60	38-47-66	
45°		6-10-19	8-13-24	11-16-27	13-19-29	15-22-32	17-24-34	21-27-38	24-29-41	
Ac = 1.80 ft. ² 36 x 8 28 x 10 24 x 12	Flow Rate (cfm)		540	720	900	1,080	1,260	1,440	1,800	2,160
	Sound (NC)	0°	-	-	15	21	26	30	37	42
	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°		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	

For performance notes see end of section.

PERFORMANCE DATA

SDG/SDGE

Core Area	Core Velocity (fpm)		300	400	500	600	700	800	1000	1200
	Velocity Pressure (in. w.g.)		0.006	0.01	0.016	0.022	0.031	0.04	0.062	0.09
	Total Pressure (in. w.g.)	0°	0.017	0.031	0.048	0.069	0.094	0.123	0.192	0.277
Core Area	Total Pressure (in. w.g.)	22.5°	0.022	0.039	0.061	0.088	0.119	0.156	0.244	0.351
		45°	0.033	0.06	0.093	0.134	0.182	0.238	0.372	0.536
Ac = 2.08 ft. ² 32 x 10 28 x 12	Flow Rate (cfm)		624	832	1,040	1,248	1,456	1,664	2,080	2,496
	Sound (NC)	0°	-	-	16	22	26	30	37	43
	Throw (ft)	0°	15-22-44	19-29-54	24-36-61	29-44-67	34-51-72	39-54-77	48-61-86	54-67-94
		22°	12-17-35	16-23-44	19-29-49	23-35-53	27-41-58	31-44-62	39-49-69	44-53-75
		45°	7-11-22	10-15-27	12-18-30	15-22-33	17-25-36	19-27-38	24-30-43	27-33-47
	Ac = 2.45 ft. ² 32 x 12	Flow Rate (cfm)		735	980	1,225	1,470	1,715	1,960	2,450
Sound (NC)		0°	-	-	17	22	27	31	38	44
Throw (ft)		0°	16-24-47	21-32-59	26-39-66	32-47-72	37-55-78	42-59-83	53-66-93	59-72-102
		22°	13-19-38	17-25-47	21-32-53	25-38-58	29-44-62	34-47-67	42-53-75	47-58-82
		45°	8-12-24	11-16-30	13-20-33	16-24-36	18-28-39	21-30-42	26-33-47	30-36-51
Ac = 2.78 ft. ² 36 x 12		Flow Rate (cfm)		834	1,112	1,390	1,668	1,946	2,224	2,780
	Sound (NC)	0°	-	-	17	23	28	32	39	44
	Throw (ft)	0°	17-25-50	22-34-63	28-42-70	34-50-77	39-59-83	45-63-89	56-70-99	63-77-109
		22°	13-20-40	18-27-50	22-34-56	27-40-62	31-47-67	36-50-71	45-56-80	50-62-87
		45°	8-13-25	11-17-31	14-21-35	17-25-38	20-29-42	22-31-44	28-35-50	31-38-54

Performance Notes:

1. Te1. Tested in accordance with ASHRAE Standard 70-2006 "Method of Testing for Rating the Performance of Air Outlets and Inlets."
2. Air flow is in cfm.
3. All pressures are in in. w.g.
4. Performance data is for the grille less air scoop, less damper and with no ceiling effect.
5. Throw values are measured in feet for terminal velocities of 150 fpm (minimum), 100 fpm (middle) and 50 fpm (maximum).
6. Throw data is based on supply air and room air being at isothermal conditions.
7. NC values are based on room absorption of 10 dB re 10⁻¹² Watts @ 0° deflection and one diffuser.
8. Blanks "-" indicate an NC level below 15.
9. The listed deflection settings refer to horizontal deflection.

PERFORMANCE DATA

SDGR/SDGER

Core Area (sq. ft.)	Nominal Size		Core Velocity (fpm) Velocity Pressure (in. w.g.) Neg. Static Pressure (in. w.g.)	NC 20				NC 30				
				200	300	400	500	600	700	800	900	1000
				0.002 0.019	0.006 0.043	0.010 0.076	0.016 0.118	0.022 0.171	0.031 0.232	0.040 0.303	0.050 0.384	0.062 0.474
0.15	6 x 5	7 x 4	Flow Rate (cfm)	30	45	60	75	90	105	120	135	150
	10 x 3		Sound (NC)	-	-	-	20	25	29	33	36	39
0.18	6 x 6	7 x 5	Flow Rate (cfm)	36	54	72	90	108	126	144	162	180
	8 x 4		Sound (NC)	-	-	-	20	25	29	33	36	39
0.22	7 x 6		Flow Rate (cfm)	44	66	88	110	132	154	176	198	220
	10 x 4		Sound (NC)	-	-	-	20	25	29	33	36	39
0.26	8 x 6	10 x 5	Flow Rate (cfm)	52	78	104	130	156	182	208	234	260
	12 x 4		Sound (NC)	-	-	-	20	25	29	33	36	39
0.30	14 x 4		Flow Rate (cfm)	60	90	120	150	180	210	240	270	300
			Sound (NC)	-	-	-	20	25	29	33	36	39
0.34	10 x 6	12 x 5	Flow Rate (cfm)	68	102	136	170	204	238	272	306	340
	16 x 4		Sound (NC)	-	-	-	20	25	29	33	36	39
0.39	8 x 8	12 x 6	Flow Rate (cfm)	78	117	156	195	234	273	312	351	390
	14 x 5	18 x 4	Sound (NC)	-	-	-	20	25	29	33	36	39
0.46	20 x 4	14 x 6	Flow Rate (cfm)	92	138	184	230	276	322	368	414	460
	16 x 5	10 x 8	Sound (NC)	-	-	-	20	25	29	33	36	39
0.52	24 x 4	16 x 6	Flow Rate (cfm)	104	156	208	260	312	364	416	468	520
	18 x 5		Sound (NC)	-	-	-	20	25	29	33	36	39
0.60	28 x 4	18 x 6	Flow Rate (cfm)	120	180	240	300	360	420	480	540	600
	20 x 5	12 x 8	Sound (NC)	-	-	-	20	25	29	33	36	39
0.69	30 x 4	20 x 6	Flow Rate (cfm)	138	207	276	345	414	483	552	621	690
	24 x 5	14 x 8	Sound (NC)	-	-	-	20	25	29	33	36	39
0.81	36 x 4	22 x 6	Flow Rate (cfm)	162	243	324	405	486	567	648	729	810
	28 x 5	16 x 8	Sound (NC)	-	-	-	20	25	29	33	36	39
0.90	30 x 5	18 x 8	Flow Rate (cfm)	180	270	360	450	540	630	720	810	900
	26 x 6	16 x 10	Sound (NC)	-	-	-	20	25	29	33	36	39
1.07	36 x 5	22 x 10	Flow Rate (cfm)	214	321	428	535	642	749	856	963	1070
	30 x 6	18 x 10	Sound (NC)	-	-	-	20	25	29	33	36	39
1.18	34 x 6	20 x 10	Flow Rate (cfm)	236	354	472	590	708	826	944	1062	1180
	24 x 8	16 x 12	Sound (NC)	-	-	-	20	25	29	33	36	39
1.34	36 x 6	22 x 10	Flow Rate (cfm)	268	402	536	670	804	938	1072	1206	1340
	28 x 8	18 x 12	Sound (NC)	-	-	-	20	25	29	33	36	39
1.60	30 x 8	22 x 12	Flow Rate (cfm)	320	480	640	800	960	1120	1280	1440	1600
	24 x 10		Sound (NC)	-	-	-	20	25	29	33	36	39
1.80	36 x 8	24 x 12	Flow Rate (cfm)	360	540	720	900	1080	1260	1440	1620	1800
	30 x 10		Sound (NC)	-	-	-	20	25	29	33	36	39
2.08	36 x 10		Flow Rate (cfm)	416	624	832	1040	1248	1456	1664	1872	2080
	30 x 12		Sound (NC)	-	-	-	20	25	29	33	36	39
2.45	32 x 12		Flow Rate (cfm)	490	735	980	1225	1470	1715	1960	2205	2450
			Sound (NC)	-	-	-	20	25	29	33	36	39
2.78	36 x 12		Flow Rate (cfm)	556	834	1112	1390	1668	1946	2224	2502	2780
			Sound (NC)	-	-	-	20	25	29	33	36	39

Performance Notes

1. Tested in accordance with ASHRAE Standard 70-2006 "Method of Testing for Rating the Performance of Air Outlets and Inlets."
2. Air flow is in cfm.
3. All pressures are in in. w.g.
4. NC values are based on room absorption of 10 dB re 10⁻¹² Watts and one grille.
5. Blanks "-" indicate an NC level below 15.