

# PERFORMANCE DATA

## 900 Supply Grille (Models 910, 920)

Size	Core Velocity (fpm)		300		400		500		600		700		800		NC 20		NC 30		NC 40																			
	Velocity Pressure (in. w.g.)		0.006		0.010		0.016		0.022		0.030		0.040		0.062		0.090		0.122		0.159		0.202															
	Total	0°	0.014	0.024	0.038	0.052	0.071	0.094	0.146	0.212	0.287	0.374	0.475	Pressure	22.5°	0.017	0.028	0.045	0.063	0.085	0.114	0.176	0.256	0.347	0.452	0.574	(in. w.g.)	45°	0.025	0.042	0.067	0.093	0.126	0.168	0.261	0.379	0.514	0.669
Ac = 0.15 ft <sup>2</sup> 7 x 4 6 x 5	Flow Rate (cfm)		45	60	75	90	105	120	150	180	210	240	270	Sound (NC)		-	-	-	-	15	19	26	31	36	40	44												
	Throw (ft)	0°	4-6-12	5-8-14	7-10-16	8-12-17	9-13-19	11-14-20	13-16-22	14-17-24	15-19-26	16-20-28	17-22-30	0°	4-6-12	5-8-14	7-10-16	8-12-17	9-13-19	11-14-20	13-16-22	14-17-24	15-19-26	16-20-28	17-22-30													
		22.5°	3-5-10	4-6-11	6-8-13	6-10-14	7-10-15	9-11-16	10-13-18	11-14-19	12-15-21	13-16-22	14-18-24	22.5°	3-5-10	4-6-11	6-8-13	6-10-14	7-10-15	9-11-16	10-13-18	11-14-19	12-15-21	13-16-22	14-18-24													
Ac = 0.18 ft <sup>2</sup> 8 x 4 7 x 5 6 x 6	Flow Rate (cfm)		55	70	90	110	125	145	180	215	250	290	325	Sound (NC)		-	-	-	-	16	20	27	32	37	41	45												
	Throw (ft)	0°	4-7-13	6-8-15	7-11-17	9-13-19	10-15-20	11-16-22	14-17-24	15-19-26	17-21-29	18-22-31	19-24-33	0°	4-7-13	6-8-15	7-11-17	9-13-19	10-15-20	11-16-22	14-17-24	15-19-26	17-21-29	18-22-31	19-24-33													
		22.5°	3-6-10	5-6-12	6-9-14	7-10-15	8-12-16	9-13-18	11-14-19	12-15-21	14-17-23	15-18-26	16-20-28	22.5°	3-6-10	5-6-12	6-9-14	7-10-15	8-12-16	9-13-18	11-14-19	12-15-21	14-17-23	15-18-26	16-20-28													
Ac = 0.22 ft <sup>2</sup> 10 x 4 8 x 5 7 x 6	Flow Rate (cfm)		65	90	110	130	155	175	220	265	310	350	395	Sound (NC)		-	-	-	-	17	21	27	33	38	42	45												
	Throw (ft)	0°	4-7-14	7-10-17	8-12-19	9-15-21	11-16-23	13-17-24	16-19-27	17-21-29	19-23-32	20-25-34	21-26-36	0°	4-7-14	7-10-17	8-12-19	9-15-21	11-16-23	13-17-24	16-19-27	17-21-29	19-23-32	20-25-34	21-26-36													
		22.5°	3-6-11	6-8-14	6-10-15	7-12-17	9-13-18	10-14-19	13-15-22	14-17-23	15-18-26	16-20-27	17-21-29	22.5°	3-6-11	6-8-14	6-10-15	7-12-17	9-13-18	10-14-19	13-15-22	14-17-23	15-18-26	16-20-27	17-21-29													
Ac = 0.26 ft <sup>2</sup> 12 x 4 10 x 5 8 x 6	Flow Rate (cfm)		80	105	130	155	180	210	260	310	365	415	470	Sound (NC)		-	-	-	-	17	21	28	34	38	42	46												
	Throw (ft)	0°	5-8-16	7-11-19	9-13-21	10-16-23	12-17-24	14-19-26	17-21-29	19-23-32	20-25-35	22-26-37	23-27-40	0°	5-8-16	7-11-19	9-13-21	10-16-23	12-17-24	14-19-26	17-21-29	19-23-32	20-25-35	22-26-37	23-27-40													
		22.5°	4-6-13	6-9-15	7-10-17	8-13-18	10-14-19	11-15-21	14-17-23	15-18-26	16-20-28	18-21-30	18-22-32	22.5°	4-6-13	6-9-15	7-10-17	8-13-18	10-14-19	11-15-21	14-17-23	15-18-26	16-20-28	18-21-30	18-22-32													
Ac = 0.30 ft <sup>2</sup> 14 x 4	Flow Rate (cfm)		90	120	150	180	210	240	300	360	420	480	540	Sound (NC)		-	-	-	-	18	22	29	34	39	43	47												
	Throw (ft)	0°	5-9-17	8-11-20	9-14-22	11-17-24	13-19-26	15-20-28	18-23-31	20-25-34	22-27-37	24-29-40	25-30-42	0°	5-9-17	8-11-20	9-14-22	11-17-24	13-19-26	15-20-28	18-23-31	20-25-34	22-27-37	24-29-40	25-30-42													
		22.5°	4-7-14	6-9-16	7-11-18	9-14-19	10-15-21	12-16-22	14-18-25	16-20-27	18-22-30	19-23-32	20-24-34	22.5°	4-7-14	6-9-16	7-11-18	9-14-19	10-15-21	12-16-22	14-18-25	16-20-27	18-22-30	19-23-32	20-24-34													
Ac = 0.34 ft <sup>2</sup> 16 x 4 12 x 5 10 x 6	Flow Rate (cfm)		100	135	170	205	240	270	340	410	475	545	610	Sound (NC)		-	-	-	-	19	23	29	35	40	44	47												
	Throw (ft)	0°	5-9-18	8-12-21	10-15-24	12-19-26	14-20-28	16-22-30	20-24-33	22-26-37	23-28-40	25-30-42	26-32-45	0°	5-9-18	8-12-21	10-15-24	12-19-26	14-20-28	16-22-30	20-24-33	22-26-37	23-28-40	25-30-42	26-32-45													
		22.5°	4-7-14	6-10-17	8-12-19	10-15-21	11-16-22	13-18-24	16-19-26	18-21-30	18-22-32	20-24-34	21-26-36	22.5°	4-7-14	6-10-17	8-12-19	10-15-21	11-16-22	13-18-24	16-19-26	18-21-30	18-22-32	20-24-34	21-26-36													
Ac = 0.39 ft <sup>2</sup> 18 x 4 14 x 5 12 x 6 8 x 8	Flow Rate (cfm)		115	155	195	235	275	310	390	470	545	625	700	Sound (NC)		-	-	-	-	19	23	30	35	40	44	48												
	Throw (ft)	0°	6-9-19	9-13-23	11-16-25	13-19-28	15-22-30	17-23-32	21-26-36	23-27-40	25-30-42	27-33-45	28-35-48	0°	6-9-19	9-13-23	11-16-25	13-19-28	15-22-30	17-23-32	21-26-36	23-27-40	25-30-42	27-33-45	28-35-48													
		22.5°	5-7-15	7-10-18	9-13-20	10-15-22	12-18-24	14-18-26	17-21-29	18-22-32	20-24-34	22-26-36	22-28-38	22.5°	5-7-15	7-10-18	9-13-20	10-15-22	12-18-24	14-18-26	17-21-29	18-22-32	20-24-34	22-26-36	22-28-38													
	45°	3-5-10	4-6-11	5-8-13	7-10-14	8-11-15	9-12-16	11-13-18	12-14-20	12-15-21	13-16-23	14-17-24	45°	3-5-10	4-6-11	5-8-13	7-10-14	8-11-15	9-12-16	11-13-18	12-14-20	12-15-21	13-16-23	14-17-24														

**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. Throw values are measured in feet for terminal velocities of 150 fpm (minimum), 100 fpm (middle) and 50 fpm (maximum).
5. Throw data is based on supply air and room air being at isothermal conditions.
6. NC values are based on room absorption of 10 dB re 10<sup>-12</sup> Watts @ 0° deflection and one diffuser.

7. Blanks "-" indicate an NC level below 15.
8. **Deflection** 0°-22.5°-45°

The listed deflection settings refer to horizontal deflection. For a 20° upward deflection, use the room throw rating for a 0° setting and the total pressure for a 22.5° horizontal setting.

The performance tables are based on registers with core style 520 with an opposed blade damper. The performance of other core styles, with or without dampers, can be obtained by the application of correction factors to the tabulated performance data.

**Corrections for 900 Series Core Styles**

Core Style	Opposed Blade Damper	Deflection	Multiply	
			Total Pressure	NC
920	Yes	0°	1	0
		22.5°	1	2
		45°	1	6
910	Yes	0°	1	0
		22.5°	1	2
		45°	1	9
920	No	0°	0.80	-4
		22.5°	0.80	-2
		45°	0.80	1
910	No	0°	0.80	-4
		22.5°	0.80	-2
		45°	0.80	1

# PERFORMANCE DATA

## 900 Supply Grille (Models 910, 920)

Size	Core Velocity (fpm)	NC 20					NC 30			NC 40			NC 50
		300	400	500	600	700	800	1000	1200	1400	1600	1800	
		0.006	0.010	0.016	0.022	0.030	0.040	0.062	0.090	0.122	0.159	0.202	
Total Pressure (in. w.g.)	0°	0.014	0.024	0.038	0.052	0.071	0.094	0.146	0.212	0.287	0.374	0.475	
	22.5°	0.017	0.028	0.045	0.063	0.085	0.114	0.176	0.256	0.347	0.452	0.574	
	45°	0.025	0.042	0.067	0.093	0.126	0.168	0.261	0.379	0.514	0.669	0.85	
Flow Rate (cfm)	0°	140	185	230	275	320	370	460	550	645	735	830	
	22.5°	-	-	-	15	20	24	31	36	41	45	49	
	45°	-	-	-	-	-	-	-	-	-	-	-	
Sound (NC)	0°	7-10-22	9-14-25	12-17-27	14-22-30	16-23-32	19-25-35	23-27-39	25-31-43	27-33-46	29-35-49	31-38-52	
	22.5°	6-8-18	7-11-20	10-14-22	11-18-24	13-18-26	15-20-28	18-22-31	20-25-34	22-26-37	23-28-39	25-30-42	
	45°	3-5-11	5-7-12	6-9-14	7-11-15	8-11-16	10-13-17	11-14-20	12-15-21	14-17-23	14-18-24	15-19-26	
Throw (ft)	0°	7-11-23	10-15-26	13-19-29	15-22-32	18-25-35	20-26-37	24-30-41	27-33-45	29-35-49	31-38-52	32-40-55	
	22.5°	6-9-18	8-12-21	10-15-23	12-18-26	14-20-28	16-21-30	19-24-33	22-26-36	22-28-39	25-30-42	26-32-44	
	45°	3-5-11	5-7-13	6-9-15	8-11-16	9-12-17	10-13-18	12-15-21	13-16-23	14-18-24	15-19-26	16-20-28	
Flow Rate (cfm)	0°	155	210	260	310	365	415	520	625	730	830	935	
	22.5°	-	-	-	16	20	24	31	37	41	45	49	
	45°	-	-	-	-	-	-	-	-	-	-	-	
Sound (NC)	0°	7-11-23	10-15-26	13-19-29	15-22-32	18-25-35	20-26-37	24-30-41	27-33-45	29-35-49	31-38-52	32-40-55	
	22.5°	6-9-18	8-12-21	10-15-23	12-18-26	14-20-28	16-21-30	19-24-33	22-26-36	22-28-39	25-30-42	26-32-44	
	45°	3-5-11	5-7-13	6-9-15	8-11-16	9-12-17	10-13-18	12-15-21	13-16-23	14-18-24	15-19-26	16-20-28	
Flow Rate (cfm)	0°	180	240	300	360	420	480	600	720	840	960	1080	
	22.5°	-	-	-	16	21	25	32	37	42	46	50	
	45°	-	-	-	-	-	-	-	-	-	-	-	
Sound (NC)	0°	7-12-24	11-16-28	14-20-31	16-24-34	19-27-37	22-29-40	26-32-45	29-35-48	31-38-52	33-40-56	35-43-60	
	22.5°	6-10-19	9-13-22	11-16-25	13-19-27	15-22-30	18-23-32	21-26-36	23-28-38	25-30-42	26-32-45	28-34-47	
	45°	4-6-12	5-8-14	7-10-16	8-12-17	10-13-19	11-14-20	13-16-22	14-17-24	15-19-26	16-20-28	17-21-29	
Flow Rate (cfm)	0°	205	275	345	415	485	550	690	830	965	1100	1240	
	22.5°	-	-	-	17	22	26	32	38	43	47	50	
	45°	-	-	-	-	-	-	-	-	-	-	-	
Sound (NC)	0°	8-13-26	12-17-30	15-22-34	18-26-37	21-29-40	24-31-43	28-34-47	30-38-52	33-40-56	35-43-60	37-45-63	
	22.5°	6-10-21	10-14-24	12-18-27	14-21-30	17-23-32	19-25-34	22-27-38	24-30-42	26-32-45	28-34-48	30-36-50	
	45°	4-6-13	6-9-15	7-11-17	9-13-18	10-14-20	12-15-21	14-17-24	15-19-26	16-20-28	18-22-30	19-23-31	
Flow Rate (cfm)	0°	245	325	405	485	565	650	810	970	1130	1300	1460	
	22.5°	-	-	-	18	22	26	33	39	43	47	51	
	45°	-	-	-	-	-	-	-	-	-	-	-	
Sound (NC)	0°	8-14-28	13-19-33	16-23-37	19-28-40	23-31-43	26-33-46	30-37-51	33-41-56	36-44-60	38-46-64	40-49-68	
	22.5°	6-11-22	10-15-26	13-18-30	15-22-32	18-25-34	21-26-37	24-30-41	26-33-45	29-35-48	30-37-51	32-39-54	
	45°	4-7-14	6-9-16	8-12-18	10-14-20	11-15-22	13-17-23	15-19-26	17-20-28	18-22-30	19-23-32	20-25-34	
Flow Rate (cfm)	0°	270	360	450	540	630	720	900	1080	1260	1440	1620	
	22.5°	-	-	-	18	23	27	34	39	44	48	51	
	45°	-	-	-	-	-	-	-	-	-	-	-	
Sound (NC)	0°	9-15-30	14-20-34	17-25-39	21-30-42	24-33-45	27-35-48	32-39-55	35-43-59	37-46-63	40-49-68	42-52-72	
	22.5°	7-12-24	11-16-27	14-20-31	17-24-34	19-26-36	22-28-38	26-31-44	28-34-47	30-37-50	32-39-54	34-42-58	
	45°	5-8-15	7-10-17	9-13-19	10-15-21	12-16-23	14-17-24	16-20-27	17-21-29	19-23-32	20-24-34	21-26-36	
Flow Rate (cfm)	0°	320	430	535	640	750	855	1070	1280	1500	1710	1930	
	22.5°	-	-	-	19	24	28	34	40	45	49	52	
	45°	-	-	-	-	-	-	-	-	-	-	-	
Sound (NC)	0°	10-16-32	15-22-38	18-28-42	22-33-46	26-36-49	29-38-53	35-43-59	38-48-64	41-50-69	43-53-74	46-57-79	
	22.5°	8-13-26	12-18-30	14-22-34	18-26-37	21-29-39	23-30-42	28-34-47	30-37-51	33-40-55	34-42-59	37-46-63	
	45°	5-8-16	7-11-19	9-14-21	11-17-23	13-18-25	14-19-26	17-21-29	19-23-32	20-25-35	22-27-37	23-28-40	

**Performance Notes:**

- Tested in accordance with ASHRAE Standard 70-2006 "Method of Testing for Rating the Performance of Air Outlets and Inlets."
- Air flow is in cfm.
- All pressures are in in. w.g.
- Throw values are measured in feet for terminal velocities of 150 fpm (minimum), 100 fpm (middle) and 50 fpm (maximum).
- Throw data is based on supply air and room air being at isothermal conditions.
- NC values are based on room absorption of 10 dB re 10<sup>-12</sup> Watts @ 0° deflection and one diffuser.
- Blanks "-" indicate an NC level below 15.
- Deflection 0°-22.5°-45°**  
The listed deflection settings refer to horizontal deflection. For a 20° upward deflection, use the room throw rating for a 0° setting and the total pressure for a 22.5° horizontal setting.  
The performance tables are based on registers with core style 520 with an opposed blade damper. The performance of other core styles, with or without dampers, can be obtained by the application of correction factors to the tabulated performance data.

**Corrections for 900 Series Core Styles**

Core Style	Opposed Blade Damper	Deflection	Multiply	Add
			Total Pressure	NC
920	Yes	0°	1	0
		22.5°	1	2
		45°	1	6
910	Yes	0°	1	0
		22.5°	1	2
		45°	1	9
920	No	0°	0.80	-4
		22.5°	0.80	-2
		45°	0.80	1
910	No	0°	0.80	-4
		22.5°	0.80	-2
		45°	0.80	1

# PERFORMANCE DATA

## 900 Supply Grille (Models 910, 920)

Size	Core Velocity (fpm)	NC 20				NC 30			NC 40		NC 50		
		300	400	500	600	700	800	1000	1200	1400	1600	1800	
		Velocity Pressure (in. w.g.)	0.006	0.010	0.016	0.022	0.030	0.040	0.062	0.090	0.122	0.159	0.202
	Total Pressure	0°	0.014	0.024	0.036	0.052	0.071	0.094	0.146	0.212	0.287	0.374	0.475
	Pressure (in. w.g.)	22.5°	0.017	0.028	0.045	0.063	0.085	0.114	0.176	0.256	0.347	0.452	0.574
		45°	0.025	0.042	0.067	0.093	0.126	0.168	0.261	0.379	0.514	0.669	0.85
Ac = 1.18 ft <sup>2</sup> 40 x 5 20 x 10 34 x 6 16 x 12 24 x 8 14 x 14	Flow Rate (cfm)	353	470	590	710	825	945	1180	1420	1650	1890	2120	
	Sound (NC)	-	-	-	19	24	28	35	40	45	49	53	
	Throw (ft)	0°	10-17-34	15-23-40	19-28-44	23-35-48	27-38-52	31-40-56	36-45-62	40-48-67	43-52-73	45-56-78	48-59-83
22.5°		8-14-27	12-18-32	15-22-35	18-28-38	22-30-42	25-32-45	29-35-50	32-38-54	34-42-58	36-45-62	38-47-66	
45°		5-8-17	8-11-20	10-14-22	12-17-24	13-19-26	15-20-28	18-22-31	20-24-34	21-26-36	23-28-39	24-30-41	
Ac = 1.34 ft <sup>2</sup> 46 x 5 22 x 10 38 x 6 18 x 12 28 x 8 16 x 14	Flow Rate (cfm)	400	535	670	805	940	1070	1340	1610	1880	2140	2410	
	Sound (NC)	-	-	-	20	24	28	35	41	45	50	53	
	Throw (ft)	0°	11-18-36	16-24-42	20-30-47	24-37-51	28-40-56	32-43-59	39-47-65	42-52-72	45-56-78	48-60-83	51-63-89
22.5°		9-14-29	13-19-34	16-24-38	19-30-41	22-32-45	26-34-47	31-38-52	34-42-58	36-45-62	38-48-66	41-50-71	
45°		6-9-18	8-12-21	10-15-23	12-18-25	14-20-28	16-21-29	19-23-33	21-26-36	23-28-39	24-30-42	26-32-44	
Ac = 1.60 ft <sup>2</sup> 44 x 6 22 x 12 43 x 8 18 x 14 26 x 10 16 x 16	Flow Rate (cfm)	480	540	800	960	1120	1280	1600	1920	2240	2560	2880	
	Sound (NC)	-	-	15	21	25	29	36	42	46	50	54	
	Throw (ft)	0°	13-20-40	18-26-46	22-32-51	27-39-56	31-43-60	35-46-64	42-51-72	46-56-79	49-61-85	53-65-91	56-69-97
22.5°		10-16-32	14-21-37	18-26-41	22-31-45	25-34-48	28-37-51	34-41-58	37-45-63	39-49-68	42-52-73	45-55-78	
45°		6-10-20	9-13-23	11-16-25	13-20-28	15-22-30	17-23-32	21-26-36	23-28-39	25-30-43	26-32-46	28-35-48	
Ac = 1.80 ft <sup>2</sup> 50 x 5 24 x 12 36 x 8 20 x 14 28 x 10 18 x 16	Flow Rate (cfm)	540	720	900	1080	1260	1440	1800	2160	2520	2880	3240	
	Sound (NC)	-	-	16	21	26	30	37	42	47	51	54	
	Throw (ft)	0°	13-21-42	19-28-48	24-35-55	29-43-59	32-46-63	37-49-68	45-55-76	48-60-84	52-65-90	56-69-87	60-73-103
22.5°		10-17-34	15-22-38	19-28-44	23-34-47	26-37-50	30-39-54	36-44-61	38-48-67	42-52-72	45-55-78	48-58-82	
45°		7-11-21	9-14-24	12-17-27	14-21-29	16-23-32	19-24-34	22-27-38	24-30-42	26-32-45	28-35-48	30-37-51	
Ac = 2.08 ft <sup>2</sup> 58 x 6 24 x 14 42 x 8 20 x 16 32 x 10 18 x 18 28 x 12	Flow Rate (cfm)	625	830	1040	1250	1460	1660	2080	2500	2910	3330	3740	
	Sound (NC)	-	-	16	22	26	30	37	43	47	51	55	
	Throw (ft)	0°	14-23-45	20-30-52	26-38-58	30-44-63	35-49-68	40-53-73	48-59-82	52-64-90	56-69-97	60-75-104	64-79-110
22.5°		11-18-36	16-24-42	21-30-46	24-35-50	28-39-54	32-42-58	38-47-66	42-51-72	45-55-78	48-60-83	51-63-88	
45°		7-11-23	10-15-26	13-19-29	15-22-32	17-25-34	20-26-37	24-29-41	26-32-45	28-35-48	30-37-52	32-40-55	
Ac = 2.45 ft <sup>2</sup> 48 x 8 26 x 14 38 x 10 24 x 16 32 x 12 20 x 18	Flow Rate (cfm)	735	980	1220	1470	1720	1960	2450	2940	3430	3920	4410	
	Sound (NC)	-	-	17	22	27	31	38	43	48	52	56	
	Throw (ft)	0°	15-25-49	22-33-57	27-40-62	32-48-68	38-54-74	43-57-80	52-64-89	57-70-97	61-76-106	65-81-113	70-87-120
22.5°		12-20-39	18-26-46	22-32-50	26-38-54	30-43-59	34-46-64	42-51-71	46-56-78	49-61-85	52-65-90	56-70-96	
45°		7-12-24	11-16-28	14-20-31	16-24-34	19-27-37	22-28-40	26-32-45	28-35-49	32-38-53	33-42-56	35-43-60	
Ac = 2.78 ft <sup>2</sup> 56 x 8 26 x 16 40 x 10 24 x 18 36 x 12 22 x 20 30 x 14	Flow Rate (cfm)	835	1110	1390	1670	1950	2220	2780	3340	3890	4450	5000	
	Sound (NC)	-	-	17	23	28	32	38	44	49	53	56	
	Throw (ft)	0°	16-26-52	23-34-60	29-42-67	35-50-73	40-57-79	45-61-85	55-68-95	60-75-104	65-81-112	70-87-122	74-93-128
22.5°		13-21-42	18-27-48	23-34-54	28-40-58	32-48-63	36-49-68	44-54-76	48-60-83	52-65-90	56-70-98	59-74-102	
45°		8-13-26	12-17-30	14-21-33	17-25-37	20-28-40	23-30-42	28-34-47	30-37-52	33-40-56	35-43-61	37-46-64	

**Performance Notes:**

- Tested in accordance with ASHRAE Standard 70-2006 "Method of Testing for Rating the Performance of Air Outlets and Inlets."
- Air flow is in cfm.
- All pressures are in in. w.g.
- Throw values are measured in feet for terminal velocities of 150 fpm (minimum), 100 fpm (middle) and 50 fpm (maximum).
- Throw data is based on supply air and room air being at isothermal conditions.
- NC values are based on room absorption of 10 dB re 10<sup>-12</sup> Watts @ 0° deflection and one diffuser.
- Blanks "-" indicate an NC level below 15.
- Deflection 0°-22.5°-45°** The listed deflection settings refer to horizontal deflection. For a 20° upward deflection, use the room throw rating for a 0° setting and the total pressure for a 22.5° horizontal setting. The performance tables are based on registers with core style 520 with an opposed blade damper. The performance of other core styles, with or without dampers, can be obtained by the application of correction factors to the tabulated performance data.

**Corrections for 900 Series Core Styles**

Core Style	Opposed Blade Damper	Deflection	Multiply	Add
			Total Pressure	NC
920	Yes	0°	1	0
		22.5°	1	2
		45°	1	6
910	Yes	0°	1	0
		22.5°	1	2
		45°	1	9
920	No	0°	0.80	-4
		22.5°	0.80	-2
		45°	0.80	1
910	No	0°	0.80	-4
		22.5°	0.80	-2
		45°	0.80	1

# PERFORMANCE DATA

## 900 Supply Grille (Models 910, 920)

Size	Core Velocity (fpm)	NC 20			NC 30			NC 40			NC 50		
		300	400	500	600	700	800	1000	1200	1400	1600	1800	
	Velocity Pressure (in. w.g.)	0.006	0.01	0.016	0.022	0.03	0.04	0.062	0.09	0.122	0.159	0.202	
	Total Pressure (in. w.g.)	0°	0.014	0.024	0.036	0.052	0.071	0.094	0.146	0.212	0.287	0.374	0.475
	22.5°	0.017	0.028	0.045	0.063	0.085	0.114	0.176	0.256	0.347	0.452	0.574	
	45°	0.025	0.042	0.067	0.093	0.126	0.168	0.261	0.379	0.514	0.669	0.85	
	Flow Rate (cfm)	935	1240	1560	1870	2180	2490	3110	3730	4350	4980	5600	
	Sound (NC)	-	-	18	23	28	32	39	44	49	53	57	
Ac = 3.11 ft <sup>2</sup> 62 x 8 30 x 16 48 x 10 26 x 18 40 x 12 24 x 20 34 x 14	Throw (ft)	0°	17-27-55	24-35-63	34-45-71	41-53-78	47-60-84	48-64-90	58-72-100	64-79-110	69-86-118	74-92-128	79-97-135
	22.5°	14-22-44	19-29-50	27-35-57	33-42-62	38-48-67	38-51-72	46-58-80	51-63-88	55-69-94	59-74-102	63-78-108	
	45°	8-14-28	12-18-31	17-22-35	20-26-39	23-30-42	24-32-45	29-36-50	32-40-55	35-43-59	37-46-64	40-49-67	
Ac = 3.61 ft <sup>2</sup> 72 x 8 30 x 18 58 x 10 28 x 20 48 x 12 24 x 24 36 x 16	Flow Rate (cfm)	1080	1440	1800	2170	2530	2890	3610	4330	5050	5780	6500	
	Sound (NC)	-	-	19	24	29	33	40	45	50	54	57	
	Throw (ft)	0°	18-29-59	26-38-68	32-47-76	38-56-84	44-65-90	51-69-97	63-78-108	69-88-118	75-93-128	80-99-137	86-105-146
Ac = 4.29 ft <sup>2</sup> 68 x 10 36 x 18 56 x 12 32 x 20 48 x 14 28 x 24 42 x 16	22.5°	14-23-47	21-30-54	26-38-61	30-45-67	35-52-72	41-55-78	50-62-86	55-69-94	60-74-102	64-79-110	69-84-117	
	45°	9-14-29	13-19-34	16-23-38	19-28-42	22-32-45	25-35-48	31-39-54	35-43-59	38-46-64	40-50-69	43-52-73	
	Flow Rate (cfm)	1290	1720	2140	2570	3000	3430	4290	5150	6010	6860	7720	
Ac = 4.65 ft <sup>2</sup> 72 x 10 40 x 18 60 x 12 36 x 20 52 x 14 30 x 24 44 x 16	NC	-	-	19	24	29	33	40	45	50	54	58	
	Throw (ft)	0°	19-31-64	28-41-74	35-50-83	42-60-91	49-71-98	56-76-106	69-85-118	76-93-130	82-102-140	88-108-149	92-115-158
	22.5°	15-25-51	22-33-59	28-40-66	34-48-73	39-57-78	45-81-85	55-68-94	61-74-104	66-82-112	70-86-119	74-92-126	
Ac = 5.58 ft <sup>2</sup> 72 x 12 48 x 18 60 x 14 42 x 20 54 x 16 36 x 24	45°	10-15-32	14-20-37	17-25-42	21-30-46	24-35-49	28-38-53	34-43-59	38-47-65	41-51-70	44-54-75	46-57-79	
	Flow Rate (cfm)	1400	1880	2320	2790	3260	3720	4650	5580	6510	7440	8370	
	Sound (NC)	-	-	20	25	30	34	41	46	51	55	59	
Ac = 6.25 ft <sup>2</sup> 72 x 14 48 x 20 60 x 16 40 x 24 54 x 18 32 x 30	Throw (ft)	0°	20-33-67	29-43-78	36-54-87	44-65-95	51-74-103	58-79-110	77-89-123	79-97-135	86-105-146	91-113-156	96-120-164
	22.5°	16-26-54	23-34-62	29-43-70	35-52-76	41-59-82	46-63-88	58-71-98	63-78-108	69-84-117	73-90-125	77-96-131	
	45°	10-16-33	15-22-39	18-27-43	22-32-48	25-37-52	29-40-55	36-44-61	39-49-67	43-52-73	46-56-78	48-60-82	
Ac = 5.58 ft <sup>2</sup> 72 x 12 48 x 18 60 x 14 42 x 20 54 x 16 36 x 24	Flow Rate (cfm)	1670	2230	2790	3350	3910	4460	5580	6700	7810	8930	10,000	
	Sound (NC)	-	-	20	26	31	35	41	47	52	56	59	
	Throw (ft)	0°	22-36-73	31-47-85	40-59-95	47-72-104	55-81-113	63-87-122	79-97-135	87-107-148	93-116-160	100-125-171	106-132-180
Ac = 6.25 ft <sup>2</sup> 72 x 14 48 x 20 60 x 16 40 x 24 54 x 18 32 x 30	22.5°	18-29-58	25-38-68	32-47-76	38-58-83	44-65-90	50-70-98	63-78-108	70-86-118	74-93-130	80-100-137	85-105-140	
	45°	11-18-37	16-23-43	20-30-48	23-36-52	28-41-57	31-44-61	39-49-67	43-53-74	47-53-80	50-62-86	53-66-90	
	Flow Rate (cfm)	1880	2500	3120	3750	4380	5000	6250	7500	8750	10,000	11,200	
Ac = 6.25 ft <sup>2</sup> 72 x 14 48 x 20 60 x 16 40 x 24 54 x 18 32 x 30	Sound (NC)	-	-	21	27	31	35	42	48	52	56	60	
	Throw (ft)	0°	23-37-78	33-49-90	42-62-100	50-75-103	58-86-119	67-93-128	84-104-143	92-113-156	96-123-169	106-132-180	112-140-192
	22.5°	18-30-62	26-39-72	34-50-80	40-60-82	46-69-95	54-74-102	67-83-114	74-90-125	78-98-135	85-105-140	90-112-153	
Ac = 6.25 ft <sup>2</sup> 72 x 14 48 x 20 60 x 16 40 x 24 54 x 18 32 x 30	45°	12-19-39	17-25-45	21-31-50	25-37-51	29-43-60	34-46-64	42-52-72	46-57-78	49-61-85	53-66-90	56-70-96	

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4. Throw values are measured in feet for terminal velocities of 150 fpm (minimum), 100 fpm (middle) and 50 fpm (maximum).
5. Throw data is based on supply air and room air being at isothermal conditions.
6. NC values are based on room absorption of 10 dB re 10<sup>-12</sup> Watts @ 0° deflection and one diffuser.
7. Blanks "-" indicate an NC level below 15.
8. **Deflection** 0°–22.5°–45° The listed deflection settings refer to horizontal deflection. For a 20° upward deflection, use the room throw rating for a 0° setting and the total pressure for a 22.5° horizontal setting. The performance tables are based on registers with core style 520 with an opposed blade damper. The performance of other core styles, with or without dampers, can be obtained by the application of correction factors to the tabulated performance data.

**Corrections for 900 Series Core Styles**

Core Style	Opposed Blade Damper	Deflection	Multiply	Add
			Total Pressure	NC
920	Yes	0°	1	0
		22.5°	1	2
		45°	1	6
910	Yes	0°	1	0
		22.5°	1	2
		45°	1	9
920	No	0°	0.80	-4
		22.5°	0.80	-2
		45°	0.80	1
910	No	0°	0.80	-4
		22.5°	0.80	-2
		45°	0.80	1