

PERFORMANCE DATA:

MODELS: RANC, RANCC, RANCP, RANCPL

Nom. Size	Nozzle Velocity, FPM	573	860	1147	1433	1720	2007	2294
4 [1 Unit]	Airflow, CFM	50	75	100	125	150	175	200
	Total Pressure	0.036	0.081	0.144	0.225	0.324	0.441	0.576
	Noise Criteria	<20	<20	<20	25	30	35	39
	Throw	4-8-13	6-12-16	8-13-19	10-15-21	12-16-23	13-18-25	13-19-27
4 [2 Units]	Airflow, CFM	100	150	200	250	300	350	400
	Total Pressure	0.036	0.081	0.144	0.225	0.324	0.441	0.576
	Noise Criteria	<20	<20	21	28	33	38	42
	Throw	6-11-19	9-16-23	11-19-27	14-21-30	16-23-33	18-25-36	19-27-38
4 [3 Units]	Airflow, CFM	150	225	300	375	450	525	600
	Total Pressure	0.036	0.081	0.144	0.225	0.324	0.441	0.576
	Noise Criteria	<20	<20	23	30	35	40	44
	Throw	8-16-27	12-23-33	16-27-38	20-30-43	23-33-47	25-36-50	27-38-54
4 [4 Units]	Airflow, CFM	200	300	400	500	600	700	800
	Total Pressure	0.036	0.081	0.144	0.225	0.324	0.441	0.576
	Noise Criteria	<20	<20	24	31	36	41	45
	Throw	7-14-23	11-20-29	14-23-33	18-26-37	20-29-40	22-31-44	23-33-47
Nom. Size	Nozzle Velocity, FPM	807	1028	1248	1468	1688	1908	2128
5 [1 Unit]	Airflow, CFM	110	140	170	200	230	260	290
	Total Pressure	0.071	0.116	0.170	0.236	0.312	0.399	0.496
	Noise Criteria	<20	<20	23	28	32	36	39
	Throw	7-14-20	9-16-23	11-18-25	13-19-27	14-20-29	15-22-31	16-23-32
5 [2 Units]	Airflow, CFM	220	280	340	400	460	520	580
	Total Pressure	0.071	0.116	0.170	0.236	0.312	0.399	0.496
	Noise Criteria	<20	20	26	31	35	39	42
	Throw	10-20-28	13-23-32	16-25-35	18-27-38	20-29-41	22-31-43	23-32-46
5 [3 Units]	Airflow, CFM	330	420	510	600	690	780	870
	Total Pressure	0.071	0.116	0.170	0.236	0.312	0.399	0.496
	Noise Criteria	<20	22	27	32	37	40	44
	Throw	12-24-35	16-28-39	19-30-43	22-33-47	25-35-50	27-38-53	28-40-56
5 [4 Units]	Airflow, CFM	440	560	680	800	920	1040	1160
	Total Pressure	0.071	0.116	0.170	0.236	0.312	0.399	0.496
	Noise Criteria	<20	23	29	34	38	42	45
	Throw	14-28-40	18-32-45	22-35-50	26-38-54	29-41-58	31-43-61	32-46-65
Nom. Size	Nozzle Velocity, FPM	714	917	1121	1352	1529	1733	1937
6 [1 Unit]	Airflow, CFM	140	180	220	260	300	340	380
	Total Pressure	0.056	0.092	0.138	0.192	0.256	0.329	0.411
	Noise Criteria	<20	<20	21	26	30	34	38
	Throw	8-15-23	10-18-26	12-20-28	14-22-31	16-23-33	18-25-35	19-26-37
6 [2 Units]	Airflow, CFM	280	360	440	520	600	680	760
	Total Pressure	0.056	0.092	0.138	0.192	0.256	0.329	0.411
	Noise Criteria	<20	<20	24	29	33	37	41
	Throw	11-21-32	14-26-36	17-28-40	20-31-43	23-33-47	25-35-50	26-37-53

PERFORMANCE DATA:

MODELS: RANC, RANCC, RANCP, RANCL

Nom. Size	Nozzle Velocity, FPM	714	917	1121	1352	1529	1733	1937
6 [3 Units]	Airflow, CFM	420	540	660	780	900	1020	1140
	Total Pressure	0.056	0.092	0.138	0.192	0.256	0.329	0.411
	Noise Criteria	<20	20	26	31	35	39	42
	Throw	13-26-39	17-31-44	21-35-49	24-38-53	28-40-57	30-43-61	32-45-64
6 [4 Units]	Airflow, CFM	560	720	880	1040	1200	1360	1520
	Total Pressure	0.056	0.092	0.138	0.192	0.256	0.329	0.411
	Noise Criteria	<20	21	27	32	36	40	44
	Throw	15-30-45	19-36-51	24-40-57	28-43-61	32-47-66	35-50-70	37-53-74
Nom. Size	Nozzle Velocity, FPM	573	717	860	1003	1147	1290	1433
8 [1 Unit]	Airflow, CFM	200	250	300	350	400	450	500
	Total Pressure	0.036	0.056	0.081	0.110	0.144	0.182	0.225
	Noise Criteria	<20	<20	<20	20	24	38	31
	Throw	8-16-27	10-20-30	12-23-33	14-25-36	16-27-38	18-29-40	20-30-43
8 [2 Units]	Airflow, CFM	400	500	600	700	800	900	1000
	Total Pressure	0.036	0.056	0.081	0.110	0.144	0.182	0.225
	Noise Criteria	<20	<20	<20	23	27	31	34
	Throw	11-23-38	14-29-43	17-33-47	20-36-50	23-38-54	26-40-57	29-43-60
8 [3 Units]	Airflow, CFM	600	750	900	1050	1200	1350	1500
	Total Pressure	0.036	0.056	0.081	0.110	0.144	0.182	0.225
	Noise Criteria	<20	<20	20	25	29	32	36
	Throw	14-28-47	18-35-52	21-40-57	25-44-62	28-47-66	32-49-70	35-52-74
8 [4 Units]	Airflow, CFM	800	1000	1200	1400	1600	1800	2000
	Total Pressure	0.036	0.056	0.081	0.110	0.144	0.182	0.225
	Noise Criteria	<20	<20	21	26	30	34	37
	Throw	16-32-54	20-40-60	24-47-66	28-50-71	32-54-76	36-57-81	40-60-85
Nom. Size	Nozzle Velocity, FPM	550	734	917	1101	1284	1468	1651
10 [1 Unit]	Airflow, CFM	300	400	500	600	700	800	900
	Total Pressure	0.033	0.059	0.092	0.133	0.181	0.236	0.299
	Noise Criteria	<20	<20	<20	25	30	34	37
	Throw	10-19-33	13-26-38	16-30-43	19-33-47	23-36-50	26-38-54	29-40-57
10 [2 Units]	Airflow, CFM	600	800	1000	1200	1400	1600	1800
	Total Pressure	0.033	0.059	0.092	0.133	0.181	0.236	0.299
	Noise Criteria	<20	<20	22	28	32	37	40
	Throw	14-27-47	18-37-54	23-43-60	27-47-66	32-50-71	37-54-76	40-57-81
10 [3 Units]	Airflow, CFM	900	1200	1500	1800	2100	2400	2700
	Total Pressure	0.033	0.059	0.092	0.133	0.181	0.236	0.299
	Noise Criteria	<20	<20	24	30	34	38	42
	Throw	17-34-57	22-45-66	28-52-74	34-57-81	39-62-87	45-66-93	49-70-99
10 [4 Units]	Airflow, CFM	1200	1600	2000	2400	2800	3200	3600
	Total Pressure	0.033	0.059	0.092	0.133	0.181	0.236	0.299
	Noise Criteria	<20	20	25	31	35	40	43
	Throw	19-39-66	26-52-76	32-60-85	39-66-93	45-71-101	52-76-108	57-81-114

D ROUND AIR NOZZLE DIFFUSERS

PERFORMANCE DATA:

MODELS: RANC, RANCC, RANCP, RANCPL

Nom. Size	Nozzle Velocity, FPM	573	765	956	1147	1338	1529	1720
12 [1 Unit]	Airflow, CFM	450	600	750	900	1050	1200	1350
	Total Pressure	0.036	0.064	0.100	0.144	0.196	0.256	0.324
	Noise Criteria	<20	<20	22	28	32	39	40
	Throw	12-24-40	16-32-47	20-37-52	24-40-57	28-44-62	32-47-66	35-49-70
12 [2 Units]	Airflow, CFM	900	1200	1500	1800	2100	2400	2700
	Total Pressure	0.036	0.064	0.100	0.144	0.196	0.256	0.324
	Noise Criteria	<20	<20	25	31	35	39	43
	Throw	17-34-57	23-46-66	29-52-74	34-57-81	40-62-87	46-66-93	49-70-99
12 [3 Units]	Airflow, CFM	1350	1800	2250	2700	3150	3600	4050
	Total Pressure	0.036	0.064	0.100	0.144	0.196	0.256	0.324
	Noise Criteria	<20	21	27	32	37	41	45
	Throw	21-42-70	28-56-81	35-64-90	42-70-99	49-76-107	56-81-114	61-86-121
12 [4 Units]	Airflow, CFM	1800	2400	3000	3600	4200	4800	5400
	Total Pressure	0.036	0.064	0.100	0.144	0.196	0.256	0.324
	Noise Criteria	<20	22	28	34	38	42	46
	Throw	24-49-81	32-65-93	40-74-104	49-81-114	57-87-123	65-93-132	70-99-140
Nom. Size	Nozzle Velocity, FPM	562	749	936	1123	1311	1498	1685
14 [1 Unit]	Airflow, CFM	600	800	1000	1200	1400	1600	1800
	Total Pressure	0.035	0.061	0.096	0.138	0.188	0.246	0.311
	Noise Criteria	<20	<20	23	28	33	37	41
	Throw	14-28-47	18-37-54	23-43-60	28-47-66	32-50-71	37-54-76	40-57-81
14 [2 Units]	Airflow, CFM	1200	1600	2000	2400	2800	3200	3600
	Total Pressure	0.035	0.061	0.096	0.138	0.188	0.246	0.311
	Noise Criteria	<20	20	26	31	36	40	44
	Throw	20-39-66	26-52-76	33-60-85	39-66-93	46-71-101	52-76-108	57-81-114
14 [3 Units]	Airflow, CFM	1800	2400	3000	3600	4200	4800	5400
	Total Pressure	0.035	0.061	0.096	0.138	0.188	0.246	0.311
	Noise Criteria	<20	22	28	33	38	42	45
	Throw	24-48-81	32-64-93	40-74-104	48-81-114	56-87-123	64-93-132	70-99-140
14 [4 Units]	Airflow, CFM	2400	3200	4000	4800	5600	6400	7200
	Total Pressure	0.035	0.061	0.096	0.138	0.188	0.246	0.311
	Noise Criteria	<20	23	29	34	39	43	47
	Throw	28-55-93	37-74-108	46-85-120	55-93-132	65-101-143	74-108-152	81-114-162
Nom. Size	Nozzle Velocity, FPM	538	717	896	1075	1245	1433	1613
16 [1 Unit]	Airflow, CFM	750	1000	1250	1500	1750	2000	2250
	Total Pressure	0.032	0.056	0.088	0.127	0.172	0.225	0.285
	Noise Criteria	<20	<20	23	28	33	37	40
	Throw	15-30-52	20-40-60	25-48-67	30-52-74	35-56-80	40-60-85	45-64-90
16 [2 Units]	Airflow, CFM	1500	2000	2500	3000	3500	4000	4500
	Total Pressure	0.032	0.056	0.088	0.127	0.172	0.225	0.285
	Noise Criteria	<20	20	26	31	36	40	43
	Throw	21-43-74	29-57-85	36-67-95	43-74-104	50-80-113	57-85-120	64-90-128



ROUND AIR NOZZLE DIFFUSERS

PERFORMANCE DATA:

MODELS: RANC, RANCC, RANCP, RANCL

Nom. Size	Nozzle Velocity, FPM	538	717	896	1075	1245	1433	1613
16 [3 Units]	Airflow, CFM	2250	3000	3750	4500	5250	6000	6750
	Total Pressure	0.032	0.056	0.088	0.127	0.172	0.225	0.285
	Noise Criteria	<20	22	27	33	38	42	45
	Throw	26-53-90	35-70-104	44-82-117	53-90-128	61-98-138	70-104-148	78-111-157
16 [4 Units]	Airflow, CFM	3000	4000	5000	6000	7000	8000	9000
	Total Pressure	0.032	0.056	0.088	0.127	0.172	0.225	0.285
	Noise Criteria	<20	23	29	34	39	43	46
	Throw	30-61-104	40-81-120	51-95-135	61-104-148	71-113-159	81-120-170	90-128-181
Nom. Size	Nozzle Velocity, FPM	566	736	906	1076	1246	1416	1586
18 [1 Unit]	Airflow, CFM	1000	1300	1600	1900	2200	2500	2800
	Total Pressure	0.035	0.059	0.090	0.127	0.170	0.219	0.275
	Noise Criteria	<20	<20	<20	29	34	38	41
	Throw	18-36-60	23-47-69	29-54-76	34-59-83	40-63-89	45-67-95	50-71-101
18 [2 Units]	Airflow, CFM	2000	2600	3200	3800	4400	5000	5600
	Total Pressure	0.035	0.059	0.090	0.127	0.170	0.219	0.275
	Noise Criteria	<20	22	27	32	34	41	44
	Throw	25-51-85	33-66-97	41-76-108	48-83-117	56-89-126	64-95-135	71-101-143
18 [3 Units]	Airflow, CFM	3000	3900	4800	5700	6600	7500	8400
	Total Pressure	0.035	0.059	0.090	0.127	0.170	0.219	0.275
	Noise Criteria	<20	24	29	34	38	42	46
	Throw	31-62-104	40-81-119	50-93-132	59-102-144	68-109-155	78-117-165	87-123-175
18 [4 Units]	Airflow, CFM	4000	5200	6400	7600	8800	10000	11200
	Total Pressure	0.035	0.059	0.090	0.127	0.170	0.219	0.275
	Noise Criteria	<20	25	30	35	40	44	47
	Throw	36-72-120	47-93-137	57-108-152	68-117-166	79-126-179	90-135-190	101-143-202
Nom. Size	Nozzle Velocity, FPM	458	596	733	871	1008	1146	1283
20 [1 Unit]	Airflow, CFM	1000	1300	1600	1900	2200	2500	2800
	Total Pressure	0.025	0.042	0.064	0.090	0.120	0.160	0.200
	Noise Criteria	<20	<20	<20	23	26	28	31
	Throw	16-33-60	21-42-69	26-52-76	31-59-83	36-63-89	41-67-95	46-71-101
Nom. Size	Nozzle Velocity, FPM	454	606	758	909	1061	1212	1364
22 [1 Unit]	Airflow, CFM	1200	1600	2000	2400	2800	3200	3600
	Total Pressure	0.025	0.042	0.068	0.096	0.130	0.170	0.220
	Noise Criteria	<20	<20	21	25	30	34	39
	Throw	17-34-66	23-46-76	29-57-85	34-66-93	40-71-101	46-76-108	51-81-114
Nom. Size	Nozzle Velocity, FPM	477	636	796	955	1114	1273	1432
24 [1 Unit]	Airflow, CFM	1500	2000	2500	3000	3500	4000	4500
	Total Pressure	0.028	0.046	0.070	0.110	0.140	0.190	0.230
	Noise Criteria	<20	<20	22	27	32	37	42
	Throw	20-40-74	27-53-85	33-67-95	40-74-104	47-80-113	53-85-120	60-90-128

Performance Notes:

- AIRFLOW CFM:** Standard air density and isothermal conditions.
- STATIC PRESSURE:** Inches of water gauge required.
- NOISE CRITERIA:** Noise Criteria [NC] curve which is not exceeded with a Room Attenuation of 10 dB and based on Sound Power Level, re 10⁻¹² watts.

- THROW:** Projection distance in feet from outlet at which the maximum velocity has reduced to 200, 100 and 50 fpm respectively.
- NOZZLE VELOCITY:** Nozzle Discharge Velocity in feet per minute [fpm].
- Data derived from tests conducted in accordance with ANSI/ASHRAE Standard 70 – 2006.