

PERFORMANCE DATA

ROUND DOUBLE DEFLECTION GRILLE WITH 1" BLADE SPACING - MODEL ARDD

MODEL	Duct Velocity Velocity Pressure	400 0.010	600 0.022	800 0.040	1000 0.062	1200 0.090	1400 0.122	1600 0.160
ARDD-06	CFM	79	118	157	196	236	275	314
	S.P.	0.023	0.052	0.081	0.148	0.205	0.282	0.358
	NC	<15	<15	18	26	32	38	43
	Throw	4-8-15	6-12-21	8-14-24	10-16-28	13-21-30	15-22-32	17-24-34
ARDD-08	CFM	140	209	279	349	419	489	559
	S.P.	0.018	0.042	0.074	0.117	0.167	0.228	0.295
	NC	<15	<15	16	24	30	36	41
	Throw	5-10-20	8-16-27	11-21-32	14-25-36	17-28-39	20-30-41	21-32-45
ARDD-10	CFM	218	327	436	545	655	764	873
	S.P.	0.016	0.037	0.065	0.102	0.146	0.200	0.260
	NC	<15	<15	15	23	29	35	39
	Throw	6-12-24	9-17-32	14-26-37	17-31-45	21-34-47	25-37-52	29-40-56
ARDD-12	CFM	314	471	628	786	943	1100	1257
	S.P.	0.015	0.034	0.059	0.094	0.133	0.183	0.237
	NC	<15	<15	15	22	28	34	38
	Throw	7-15-30	12-24-40	16-33-47	20-37-53	25-41-59	29-45-65	33-48-74
ARDD-14	CFM	428	641	855	1069	1283	1497	1711
	S.P.	0.014	0.032	0.056	0.085	0.127	0.171	0.223
	NC	<15	<15	15	22	28	34	38
	Throw	8-18-37	14-28-47	18-38-55	23-44-61	30-48-70	34-52-74	38-56-83
ARDD-16	CFM	559	838	1117	1396	1676	1955	2234
	S.P.	0.014	0.030	0.053	0.084	0.120	0.163	0.212
	NC	<15	<15	15	22	28	34	38
	Throw	10-20-40	15-30-53	22-44-65	28-50-72	34-54-80	40-60-85	45-64-90
ARDD-18	CFM	707	1060	1414	1767	2121	2474	2828
	S.P.	0.013	0.030	0.051	0.080	0.115	0.158	0.205
	NC	<15	<15	16	23	29	35	39
	Throw	11-22-44	18-36-61	25-50-72	31-57-80	40-63-89	45-67-95	50-71-101
ARDD-20	CFM	873	1309	1746	2182	2618	3055	3491
	S.P.	0.013	0.029	0.050	0.078	0.112	0.152	0.197
	NC	<15	<15	16	23	29	35	39
	Throw	12-24-49	20-40-68	27-53-80	35-63-89	44-68-99	51-74-105	56-78-112
ARDD-22	CFM	1056	1584	2112	2640	3168	3696	4224
	S.P.	0.012	0.028	0.048	0.076	0.108	0.148	0.192
	NC	<15	<15	17	24	30	36	40
	Throw	13-27-54	22-44-74	30-57-85	37-68-98	47-76-110	57-85-120	60-87-123
ARDD-24	CFM	1257	1885	2514	3142	3770	4399	5027
	S.P.	0.012	0.027	0.047	0.075	0.107	0.144	0.189
	NC	<15	<15	18	25	32	37	41
	Throw	14-29-60	24-48-81	33-66-95	41-75-106	50-84-116	58-88-124	66-95-130

Performance data based on ASHRAE 70-91

Throw: Distance in feet from the nozzle discharge at which the maximum velocity has been reduced to specified terminal velocity [Vt].

Terminal Velocity: Maximum velocity [Vt] in feet per minute at the specified distance from the outlet face. Throw is listed at 200 fpm, 100 fpm and 50 fpm respectively.

Airflow CFM: Standard air density and isothermal conditions.

Static Pressure: Inches of water gauge.

Noise Criteria: Noise criteria [NC] curve which is not exceeded with a room attenuation of 10db and based on sound power level re:10-12 watts.

Performance values for various deflection angles

Deflection Angle	0°	10°	20°	30°	40°
Total Pressure [times]	1.0	1.2	1.4	1.9	2.4
Throw [times]	1.0	0.9	0.8	0.7	0.6
Noise Criteria - NC [add]	+0	+3	+7	+11	+16

PERFORMANCE DATA

ROUND DOUBLE DEFLECTION GRILLE WITH 2" BLADE SPACING - MODEL ARDD2

MODEL	Duct Velocity Velocity Pressure	400 0.010	600 0.022	800 0.040	1000 0.062	1200 0.090	1400 0.122	1600 0.160
ARDD2-08	CFM	140	209	279	349	419	489	559
	S.P.	0.015	0.035	0.062	0.099	0.141	0.193	0.250
	NC	<15	<15	<15	20	26	32	37
	Throw	5-10-20	8-16-27	11-21-32	14-25-36	17-28-39	20-30-41	21-32-45
ARDD2-10	CFM	218	327	436	545	655	764	873
	S.P.	0.013	0.031	0.055	0.086	0.124	0.170	0.221
	NC	<15	<15	15	19	25	31	35
	Throw	6-12-24	9-17-32	14-26-37	17-31-45	21-34-47	25-37-52	29-40-56
ARDD2-12	CFM	314	471	628	786	943	1100	1257
	S.P.	0.013	0.029	0.051	0.081	0.115	0.159	0.206
	NC	<15	<15	15	19	25	31	35
	Throw	7-15-30	12-24-40	16-33-47	20-37-53	25-41-59	29-45-65	33-48-74
ARDD2-14	CFM	428	641	855	1069	1283	1497	1711
	S.P.	0.012	0.028	0.050	0.076	0.114	0.153	0.200
	NC	<15	<15	<15	20	26	32	36
	Throw	8-18-37	14-28-47	18-38-55	23-44-61	30-48-70	34-52-74	38-56-83
ARDD2-16	CFM	559	838	1117	1396	1676	1955	2234
	S.P.	0.013	0.027	0.049	0.078	0.111	0.151	0.197
	NC	<15	<15	<15	21	27	33	37
	Throw	10-20-40	15-30-53	22-44-65	28-50-72	34-54-80	40-60-85	45-64-90
ARDD2-18	CFM	707	1060	1414	1767	2121	2474	2828
	S.P.	0.012	0.028	0.048	0.076	0.109	0.150	0.194
	NC	<15	<15	16	23	29	35	39
	Throw	11-22-44	18-36-61	25-50-72	31-57-80	40-63-89	45-67-95	50-71-101
ARDD2-20	CFM	873	1309	1746	2182	2618	3055	3491
	S.P.	0.012	0.027	0.047	0.074	0.106	0.144	0.187
	NC	<15	<15	16	23	29	35	39
	Throw	12-24-49	20-40-68	27-53-80	35-63-89	44-68-99	51-74-105	56-78-112
ARDD2-22	CFM	1056	1584	2112	2640	3168	3696	4224
	S.P.	0.011	0.026	0.045	0.072	0.102	0.140	0.182
	NC	<15	<15	17	24	30	36	40
	Throw	13-27-54	22-44-74	30-57-85	37-68-98	47-76-110	57-85-120	60-87-123
ARDD2-24	CFM	1257	1885	2514	3142	3770	4399	5027
	S.P.	0.011	0.025	0.044	0.071	0.101	0.136	0.179
	NC	<15	<15	18	25	32	37	41
	Throw	14-29-60	24-48-81	33-66-95	41-75-106	50-84-116	58-88-124	66-95-130

Performance data based on ASHRAE 70-91

Throw: Distance in feet from the nozzle discharge at which the maximum velocity has been reduced to specified terminal velocity [Vt].

Terminal Velocity: Maximum velocity [Vt] in feet per minute at the specified distance from the outlet face. Throw is listed at 200 fpm, 100 fpm and 50 fpm respectively.

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Noise Criteria: Noise criteria [NC] curve which is not exceeded with a room attenuation of 10db and based on sound power level re:10-12 watts.

Performance values for various deflection angles

Deflection Angle	0°	10°	20°	30°	40°
Total Pressure [times]	1.0	1.1	1.2	1.7	2.1
Throw [times]	1.0	0.9	0.8	0.7	0.6
Noise Criteria - NC [add]	+0	+2	+5	+8	+12