

AIRCONCEPTS

AIR DISTRIBUTION PRODUCTS

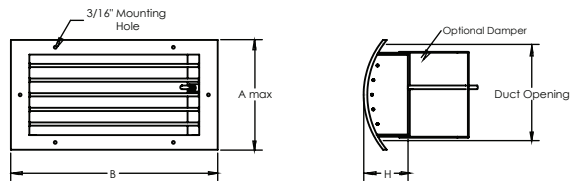


RGSD SERIES

RGSD-C/F

RGSD-C

Rectangular Grille Single Deflection
- Curved Frame

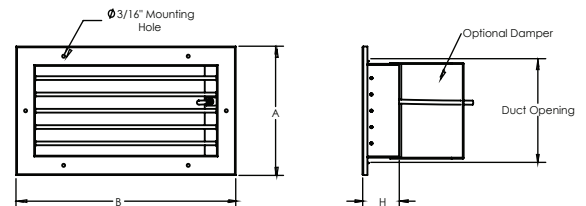
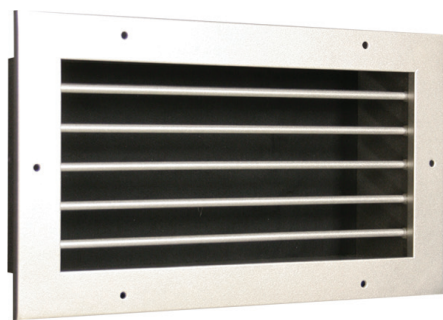


RGSD-C Dimensions in Inches

MODEL	A-MAX	B	H	DUCT OPENING	MIN DUCT DIAMETER	MOUNT HOLES
RGSD-1204-C	5 ¹ / ₈	13 ⁷ / ₈	3	12 x 4	8	6
RGSD-1804-C	5 ¹ / ₈	19 ¹ / ₈	3	18 x 4	8	8
RGSD-2404-C	5 ¹ / ₈	25 ¹ / ₈	3	24 x 4	8	10
RGSD-3004-C	5 ¹ / ₈	31 ¹ / ₈	3	30 x 4	8	10
RGSD-1206-C	7 ¹ / ₈	13 ⁷ / ₈	3	12 x 6	10	6
RGSD-1806-C	7 ¹ / ₈	19 ¹ / ₈	3	18 x 6	10	8
RGSD-2406-C	7 ¹ / ₈	25 ¹ / ₈	3	24 x 6	10	10
RGSD-3006-C	7 ¹ / ₈	31 ¹ / ₈	3	30 x 6	10	10
RGSD-1208-C	9 ¹ / ₈	13 ⁷ / ₈	3	12 x 8	14	6
RGSD-1808-C	9 ¹ / ₈	19 ¹ / ₈	3	18 x 8	14	8
RGSD-2408-C	9 ¹ / ₈	25 ¹ / ₈	3	24 x 8	14	10
RGSD-3008-C	9 ¹ / ₈	31 ¹ / ₈	3	30 x 8	14	10
RGSD-1210-C	11 ¹ / ₈	13 ⁷ / ₈	3	12 x 10	16	6
RGSD-1810-C	11 ¹ / ₈	19 ¹ / ₈	3	18 x 10	16	8
RGSD-2410-C	11 ¹ / ₈	25 ¹ / ₈	3	24 x 10	16	10
RGSD-3010-C	11 ¹ / ₈	31 ¹ / ₈	3	30 x 10	16	10
RGSD-1212-C	13 ¹ / ₈	13 ⁷ / ₈	3	12 x 12	18	8
RGSD-1812-C	13 ¹ / ₈	19 ¹ / ₈	3	18 x 12	18	10
RGSD-2412-C	13 ¹ / ₈	25 ¹ / ₈	3	24 x 12	18	12
RGSD-3012-C	13 ¹ / ₈	31 ¹ / ₈	3	30 x 12	18	12

RGSD-F

Rectangular Grille Single Deflection
- Flat Frame



RGSD-F Dimensions in Inches

MODEL	A	B	H	DUCT OPENING	MOUNT HOLES
RGSD-1204-F	5 ¹ / ₈	13 ⁷ / ₈	3	12 x 4	6
RGSD-1804-F	5 ¹ / ₈	19 ¹ / ₈	3	18 x 4	8
RGSD-2404-F	5 ¹ / ₈	25 ¹ / ₈	3	24 x 4	10
RGSD-3004-F	5 ¹ / ₈	31 ¹ / ₈	3	30 x 4	10
RGSD-1206-F	7 ¹ / ₈	13 ⁷ / ₈	3	12 x 6	6
RGSD-1806-F	7 ¹ / ₈	19 ¹ / ₈	3	18 x 6	8
RGSD-2406-F	7 ¹ / ₈	25 ¹ / ₈	3	24 x 6	10
RGSD-3006-F	7 ¹ / ₈	31 ¹ / ₈	3	30 x 6	10
RGSD-1208-F	9 ¹ / ₈	13 ⁷ / ₈	3	12 x 8	6
RGSD-1808-F	9 ¹ / ₈	19 ¹ / ₈	3	18 x 8	8
RGSD-2408-F	9 ¹ / ₈	25 ¹ / ₈	3	24 x 8	10
RGSD-3008-F	9 ¹ / ₈	31 ¹ / ₈	3	30 x 8	10
RGSD-1210-F	11 ¹ / ₈	13 ⁷ / ₈	3	12 x 10	6
RGSD-1810-F	11 ¹ / ₈	19 ¹ / ₈	3	18 x 10	8
RGSD-2410-F	11 ¹ / ₈	25 ¹ / ₈	3	24 x 10	10
RGSD-3010-F	11 ¹ / ₈	31 ¹ / ₈	3	30 x 10	10
RGSD-1212-F	13 ¹ / ₈	13 ⁷ / ₈	3	12 x 12	8
RGSD-1812-F	13 ¹ / ₈	19 ¹ / ₈	3	18 x 12	10
RGSD-2412-F	13 ¹ / ₈	25 ¹ / ₈	3	24 x 12	12
RGSD-3012-F	13 ¹ / ₈	31 ¹ / ₈	3	30 x 12	12

Construction

Heavy gauge aluminum
Foam Gasket

Finishes

Standard: #52 White powder coat
Optional standard:
#00 Mill
#12 Anodized powder coat
#42 Gloss black powder coat
#43 Flat black powder coat
#62 Grey prime powder coat
#72 Silver metallic powder coat
Custom colors available

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
RGSD-1204	CFM	110	170	220	280	340	390	450
	Static Pressure	0.016	0.037	0.066	0.103	0.148	0.201	0.260
	NC	<15	<15	<15	21	27	33	38
	Projection	7-15-28	10-20-35	15-29-43	19-33-47	23-37-52	27-39-54	28-44-60
RGSD-1804	CFM	170	260	340	430	520	600	690
	Static Pressure	0.014	0.033	0.059	0.092	0.131	0.180	0.234
	NC	<15	<15	<15	20	26	32	36
	Projection	8-16-32	11-22-40	18-34-48	22-40-59	26-44-61	32-48-66	37-51-70
RGSD-2404	CFM	230	340	460	570	680	800	910
	Static Pressure	0.014	0.032	0.055	0.087	0.123	0.170	0.220
	NC	<15	<15	<15	19	25	32	36
	Projection	9-18-35	13-25-49	19-38-56	25-46-66	30-50-74	34-53-77	40-57-84
RGSD-3004	CFM	290	430	580	720	860	1010	1150
	Static Pressure	0.014	0.031	0.052	0.083	0.118	0.162	0.210
	NC	<15	<15	<15	19	25	31	35
	Projection	9-19-38	14-28-55	21-42-65	28-52-70	36-58-82	39-62-88	46-68-101

RGSD-1206	CFM	180	260	350	440	530	620	700
	Static Pressure	0.014	0.033	0.058	0.091	0.130	0.178	0.232
	NC	<15	<15	<15	20	26	32	36
	Projection	8-16-32	11-23-41	18-34-48	22-41-59	27-45-61	33-49-68	39-53-73
RGSD-1806	CFM	270	400	540	670	800	940	1070
	Static Pressure	0.014	0.031	0.053	0.084	0.119	0.163	0.211
	NC	<15	<15	<15	19	25	31	35
	Projection	9-19-37	14-27-53	21-41-61	27-50-69	34-54-80	38-60-86	44-64-99
RGSD-2406	CFM	360	540	720	900	1080	1260	1440
	Static Pressure	0.013	0.029	0.050	0.077	0.114	0.154	0.201
	NC	<15	<15	<15	19	25	31	35
	Projection	10-21-42	16-32-60	23-44-70	30-56-72	38-62-91	44-66-98	48-72-106
RGSD-3006	CFM	450	680	900	1130	1360	1580	1810
	Static Pressure	0.013	0.027	0.048	0.076	0.109	0.149	0.193
	NC	<15	<15	<15	19	25	31	35
	Projection	12-23-47	18-36-65	27-54-82	35-64-90	42-64-100	50-76-106	57-80-114

Projection: Projection distance [THROW] 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] 200 fpm, 100fpm and 50 fpm respectively.

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 10db and based on Sound Power Level Re: 10-12 watts.

Performance data based on ASHRAE 70-06

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 Projection [times]	1.0	0.9	0.8	0.7	0.6
Noise Criteria – NC [add]	+0	+3	+7	+11	+16

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
RGSD-1208	CFM	240	360	480	600	720	840	960
	Static Pressure	0.014	0.031	0.054	0.086	0.122	0.167	0.215
	NC	<15	<15	<15	19	25	31	35
	Projection	9-18-35	13-26-51	20-39-59	25-47-67	31-51-75	35-57-82	41-62-93
RGSD-1808	CFM	360	550	730	910	1090	1270	1460
	Static Pressure	0.013	0.029	0.050	0.077	0.114	0.153	0.200
	NC	<15	<15	<15	19	25	31	35
	Projection	11-21-42	16-32-60	22-44-71	30-56-69	39-63-92	44-67-98	49-73-108
RGSD-2408	CFM	490	730	980	1220	1460	1710	1950
	Static Pressure	0.013	0.027	0.048	0.076	0.108	0.147	0.191
	NC	<15	<15	<15	19	25	31	35
	Projection	12-24-49	19-38-69	28-56-84	37-66-93	45-71-106	53-79-112	59-84-118
RGSD-3008	CFM	620	920	1230	1540	1850	2160	2460
	Static Pressure	0.012	0.027	0.046	0.072	0.104	0.142	0.185
	NC	<15	<15	<15	20	26	32	36
	Projection	14-28-56	22-44-78	32-64-92	40-74-103	52-80-114	58-86-123	65-92-130

RGSD-1210	CFM	300	460	610	760	910	1060	1220
	Static Pressure	0.014	0.030	0.052	0.081	0.117	0.160	0.207
	NC	<15	<15	<15	19	25	31	35
	Projection	10-20-39	14-29-56	21-43-66	28-52-70	36-56-82	40-62-90	45-67-101
RGSD-1810	CFM	460	690	920	1150	1380	1610	1840
	Static Pressure	0.013	0.027	0.048	0.076	0.109	0.148	0.192
	NC	<15	<15	<15	19	25	31	35
	Projection	12-24-47	18-37-66	27-55-83	35-64-91	43-68-101	50-77-107	56-80-113
RGSD-2410	CFM	620	930	1240	1550	1860	2170	2480
	Static Pressure	0.012	0.027	0.046	0.072	0.104	0.142	0.185
	NC	<15	<15	<15	20	26	32	36
	Projection	14-28-56	22-44-77	32-63-91	40-73-103	52-80-115	58-86-123	65-92-131
RGSD-3010	CFM	780	1170	1560	1950	2340	2730	3120
	Static Pressure	0.012	0.026	0.045	0.070	0.101	0.137	0.177
	NC	<15	<15	<15	20	26	32	36
	Projection	16-32-64	26-52-88	35-68-104	45-81-115	57-88-129	67-97-138	73-101-146

Projection: Projection distance [THROW] 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] 200 fpm, 100fpm and 50 fpm respectively.

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 10db and based on Sound Power Level Re: 10-12 watts.

Performance data based on ASHRAE 70-06

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 Projection [times]	1.0	0.9	0.8	0.7	0.6
Noise Criteria – NC [add]	+0	+3	+7	+11	+16

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
RGSD-1212	CFM	370	550	740	920	1100	1290	1470
	Static Pressure	0.013	0.029	0.050	0.077	0.113	0.153	0.200
	NC	<15	<15	<15	19	25	31	35
	Projection	11-21-42	16-32-60	22-45-70	31-56-73	39-63-92	45-67-98	49-73-107
RGSD-1812	CFM	560	840	1120	1400	1680	1960	2240
	Static Pressure	0.013	0.027	0.047	0.074	0.106	0.145	0.188
	NC	<15	<15	<15	20	26	32	36
	Projection	13-26-53	21-41-75	31-62-90	38-71-99	47-76-108	55-82-117	62-88-124
RGSD-2412	CFM	750	1130	1500	1880	2260	2630	3010
	Static Pressure	0.012	0.026	0.045	0.070	0.101	0.137	0.178
	NC	<15	<15	<15	20	26	32	36
	Projection	16-31-63	25-51-85	34-65-102	45-79-112	55-85-125	65-94-132	70-98-142
RGSD-3012	CFM	940	1420	1890	2360	2830	3300	3780
	Static Pressure	0.011	0.025	0.043	0.068	0.097	0.133	0.173
	NC	<15	<15	<15	21	27	33	37
	Projection	18-36-73	30-60-97	38-74-110	48-88-126	60-98-142	74-110-155	78-111-158

Performance data based on ASHRAE 70-06

Projection: Projection distance [THROW] 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] 200 fpm, 100fpm and 50 fpm respectively.

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 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 Projection [times]	1.0	0.9	0.8	0.7	0.6
Noise Criteria – NC [add]	+0	+3	+7	+11	+16