

AIRCONCEPTS

AIR DISTRIBUTION PRODUCTS

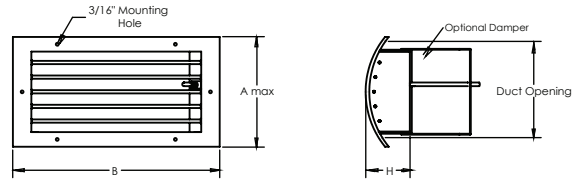
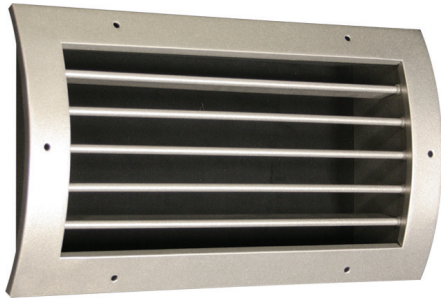


RGSD SERIES

RGSD-C/F

RGSD-C

Rectangular Grille Single Deflection
- Curved Frame

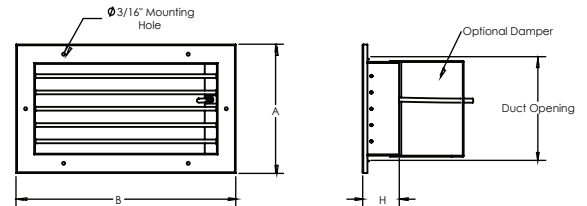


RGSD-C Dimensions in Inches

| 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 |