

# Diffuser air flow specifications

MV2, GRD2, GR2 (8x8") Ak=.33

CFM	PRESSURE LOSS	THROW*	FACE VELOCITY**
55	.006 WG	4.9 ft	164 ft/min
75	.009 WG	6.7 ft	229 ft/min
90	.014 WG	8.0 ft	264 ft/min
110	.021 WG	9.8 ft	330 ft/min
125	.027 WG	11.1 ft	375 ft/min
150	.039 WG	13.4 ft	451 ft/min
175	.053 WG	15.6 ft	533 ft/min
200	.069 WG	17.8 ft	604 ft/min
250	.108 WG	22.3 ft	757 ft/min
300	.156 WG	26.7 ft	909 ft/min
350	.212 WG	31.2 ft	1060 ft/min



MV2S, GR2S (6x6") Ak=.17

CFM	PRESSURE LOSS	THROW*	FACE VELOCITY**
55	.028 WG	4.5 ft	308 ft/min
75	.054 WG	6.0 ft	421 ft/min
90	.102 WG	7.1 ft	592 ft/min
110	.145 WG	8.9 ft	663 ft/min
125	.181 WG	10.3 ft	785 ft/min
150	.245 WG	11.5 ft	903 ft/min
175	.325 WG	12.6 ft	1045 ft/min
200	.430 WG	14.0 ft	1155 ft/min

MV3, GRD3, GR3 (8x8") Ak=.29

CFM	PRESSURE LOSS	THROW*	FACE VELOCITY**
55	.008 WG	5.0 ft	188 ft/min
75	.014 WG	6.8 ft	255 ft/min
90	.020 WG	8.1 ft	310 ft/min
110	.030 WG	9.9 ft	370 ft/min
125	.038 WG	11.3 ft	445 ft/min
150	.054 WG	13.5 ft	517 ft/min
175	.073 WG	15.8 ft	602 ft/min
200	.095 WG	18.0 ft	689 ft/min
250	.148 WG	22.5 ft	862 ft/min
300	.213 WG	27.0 ft	1034 ft/min
350	.289 WG	31.5 ft	1206 ft/min



Throw measurements are equal in all three directions +/-5%

MV3S, GR3S (6x6") Ak=.17

CFM	PRESSURE LOSS	THROW*	FACE VELOCITY**
55	.056 WG	5.3 ft	344 ft/min
75	.075 WG	7.2 ft	426 ft/min
90	.130 WG	8.8 ft	570 ft/min
110	.171 WG	10.2 ft	661 ft/min
125	.230 WG	11.1 ft	785 ft/min
150	.290 WG	11.5 ft	880 ft/min
175	.445 WG	12.1 ft	994 ft/min
200	.545 WG	12.8 ft	1182 ft/min

MV4, GRD4, GR4 (8x8") Ak=.30

CFM	PRESSURE LOSS	THROW*	FACE VELOCITY**
55	.007 WG	3.9 ft	183 ft/min
75	.011 WG	5.3 ft	247 ft/min
90	.017 WG	6.4 ft	293 ft/min
110	.024 WG	7.8 ft	359 ft/min
125	.030 WG	8.9 ft	410 ft/min
150	.043 WG	10.6 ft	505 ft/min
175	.057 WG	12.4 ft	562 ft/min
200	.073 WG	14.2 ft	640 ft/min
250	.114 WG	17.7 ft	833 ft/min
300	.164 WG	21.3 ft	1000 ft/min
350	.223 WG	24.8 ft	1166 ft/min



MV4S, GR4S (6x6") Ak=.20

CFM	PRESSURE LOSS	THROW*	FACE VELOCITY**
55	.050 WG	4.5 ft	330 ft/min
75	.085 WG	6.3 ft	361 ft/min
90	.117 WG	7.1 ft	440 ft/min
110	.160 WG	8.2 ft	527 ft/min
125	.200 WG	9.1 ft	605 ft/min
150	.290 WG	10.2 ft	750 ft/min
175	.395 WG	10.9 ft	875 ft/min
200	.490 WG	11.5 ft	962 ft/min

MV360, GRD360, GR360 (8x8") Ak=.33

CFM	PRESSURE LOSS	THROW*	FACE VELOCITY**
55	.002 WG	3.0 ft	161 ft/min
75	.003 WG	3.6 ft	223 ft/min
90	.004 WG	3.8 ft	269 ft/min
110	.005 WG	4.0 ft	328 ft/min
125	.006 WG	5.0 ft	381 ft/min
150	.010 WG	5.5 ft	449 ft/min
175	.015 WG	6.5 ft	527 ft/min
200	.021 WG	7.0 ft	612 ft/min
250	.029 WG	8.0 ft	755 ft/min
300	.038 WG	9.0 ft	904 ft/min
350	.045 WG	10.0 ft	1055 ft/min



MV360S, GR360S (6x6") Ak=.17

CFM	PRESSURE LOSS	THROW*	FACE VELOCITY**
55	.006 WG	0.8 ft	214 ft/min
75	.009 WG	1.5 ft	284 ft/min
90	.014 WG	2.2 ft	347 ft/min
110	.018 WG	2.3 ft	415 ft/min
125	.025 WG	3.2 ft	437 ft/min
150	.036 WG	4.4 ft	544 ft/min
175	.045 WG	5.5 ft	614 ft/min
200	.060 WG	6.4 ft	699 ft/min

\*All throw measurements are made from the center of the grille to a terminal velocity of 50 feet per minute. Direction determined by grille profile. .

\*\*Noise level of any diffuser is directly related to face velocity. As a general rule face velocity should be under 800 FPM for residential applications.  
The MV diffuser with its one piece molded design, outperforms comparable diffusers causing less turbulence and noise.

## MVE, GRDE, GRE (8x8") Ak=.37

CFM	PRESSURE LOSS	THROW*	FACE VELOCITY**
55	.0005 WG	0.8 ft	92 ft/min
75	.0008 WG	2.1 ft	151 ft/min
90	.0014 WG	3.4 ft	207 ft/min
110	.0017 WG	5.6 ft	255 ft/min
125	.0020 WG	7.8 ft	350 ft/min
150	.0030 WG	9.7 ft	445 ft/min
175	.0050 WG.	11.4 ft	545 ft/min
200	.0080 WG	12.8 ft	700 ft/min
250	.0200 WG	14.1 ft	910 ft/min
300	.0250 WG	14.8 ft	1044 ft/min
350	.0300 WG	15.4 ft	1187 ft/min



## MVES, GRES (6x6") Ak=.31

CFM	PRESSURE LOSS	THROW*	FACE VELOCITY**
55	.0008 WG	1.2 ft	146 ft/min
75	.0018 WG	4.2 ft	230 ft/min
90	.0035 WG	6.2 ft	285 ft/min
110	.0043 WG	7.3 ft	338 ft/min
125	.0054 WG	8.7 ft	434 ft/min
150	.0085 WG	9.8 ft	545 ft/min
175	.0100 WG.	11.0 ft	645 ft/min
200	.0110 WG	12.4 ft	685 ft/min

## MXE (8x8") Ak=.37

CFM	PRESSURE LOSS	THROW*	FACE VELOCITY**
55	.0005 WG	0.8 ft	92 ft/min
75	.0008 WG	2.1 ft	151 ft/min
90	.0014 WG	3.4 ft	207 ft/min
110	.0017 WG	5.6 ft	255 ft/min
125	.0020 WG	7.8 ft	350 ft/min
150	.0030 WG	9.7 ft	445 ft/min
175	.0050 WG.	11.4 ft	545 ft/min
200	.0080 WG	12.8 ft	700 ft/min
250	.0200 WG	14.1 ft	910 ft/min
300	.0250 WG	14.8 ft	1044 ft/min
350	.0300 WG	15.4 ft	1187 ft/min

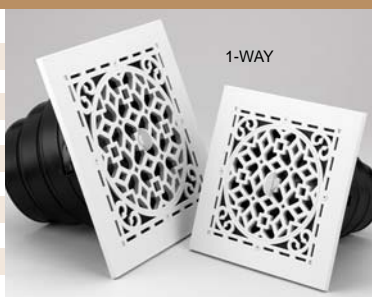


## MXES (6x6") Ak=.31

CFM	PRESSURE LOSS	THROW*	FACE VELOCITY**
55	.0008 WG	1.2 ft	146 ft/min
75	.0018 WG	4.2 ft	230 ft/min
90	.0035 WG	6.2 ft	285 ft/min
110	.0043 WG	7.3 ft	338 ft/min
125	.0054 WG	8.7 ft	434 ft/min
150	.0085 WG	9.8 ft	545 ft/min
175	.0100 WG.	11.0 ft	645 ft/min
200	.0110 WG	12.4 ft	685 ft/min

## MVAW, GRDAW, GRAW (8x8") Ak=.26

CFM	PRESSURE LOSS	THROW*	FACE VELOCITY**
55	.0007 WG	4.0 ft	175 ft/min
75	.0009 WG	6.8 ft	269 ft/min
90	.0021 WG	8.2 ft	383 ft/min
110	.0055 WG	9.9 ft	436 ft/min
125	.0064 WG	11.3 ft	472 ft/min
150	.0085 WG	12.9 ft	593 ft/min
175	.0105 WG.	14.3 ft	693 ft/min
200	.0160 WG	15.3 ft	841 ft/min
250	.0230 WG	16.0 ft	1031 ft/min
300	.0391 WG	17.2 ft	1201 ft/min
350	.0552 WG	17.9 ft	1315 ft/min



## MVASW, GRASW (6x6") Ak=.20

CFM	PRESSURE LOSS	THROW*	FACE VELOCITY**
55	.0085 WG	2.1 ft	277 ft/min
75	.0185 WG	5.0 ft	373 ft/min
90	.0240 WG	7.9 ft	445 ft/min
110	.0375 WG	10.9 ft	550 ft/min
125	.0520 WG	13.3 ft	650 ft/min
150	.0730 WG	14.9 ft	771 ft/min
175	.1010 WG.	16.3 ft	899 ft/min
200	.1200 WG	17.5 ft	988 ft/min

## MVAB, GRDAB, GRAB (8x8") Ak=.26

CFM	PRESSURE LOSS	THROW*	FACE VELOCITY**
55	.0007 WG	4.0 ft	175 ft/min
75	.0009 WG	6.8 ft	269 ft/min
90	.0021 WG	8.2 ft	383 ft/min
110	.0055 WG	9.9 ft	436 ft/min
125	.0064 WG	11.3 ft	472 ft/min
150	.0085 WG	12.9 ft	593 ft/min
175	.0105 WG.	14.3 ft	693 ft/min
200	.0160 WG	15.3 ft	841 ft/min
250	.0230 WG	16.0 ft	1031 ft/min
300	.0391 WG	17.2 ft	1201 ft/min
350	.0552 WG	17.9 ft	1315 ft/min



## MVASB, GRASB (6x6") Ak=.20

CFM	PRESSURE LOSS	THROW*	FACE VELOCITY**
55	.0085 WG	2.1 ft	277 ft/min
75	.0185 WG	5.0 ft	373 ft/min
90	.0240 WG	7.9 ft	445 ft/min
110	.0375 WG	10.9 ft	550 ft/min
125	.0520 WG	13.3 ft	650 ft/min
150	.0730 WG	14.9 ft	771 ft/min
175	.1010 WG.	16.3 ft	899 ft/min
200	.1200 WG	17.5 ft	988 ft/min

Note: Supply diameter has no appreciable effect on characteristics or airflow specifications, but should be consistent with the desired airflow of the particular outlet and application.  
Instruments used in testing: • Shortridge Instruments Flowhood Series 8400 • Shortridge Instruments Air data Multimeter • Davis LCA-6000 Rotating Vane Anemometer