

Non-Ducted Supply Grilles - Spread and Throw Characteristics

One of the most important setup procedures for non-ducted supply applications is to adjust the 4 way supply grille blade positions. Placement of equipment, occupants, the thermostat, and room size can all play an important role in deciding how the conditioned supply air must be directed in an indoor area. The chart below may be used as a reference tool to help with this process.

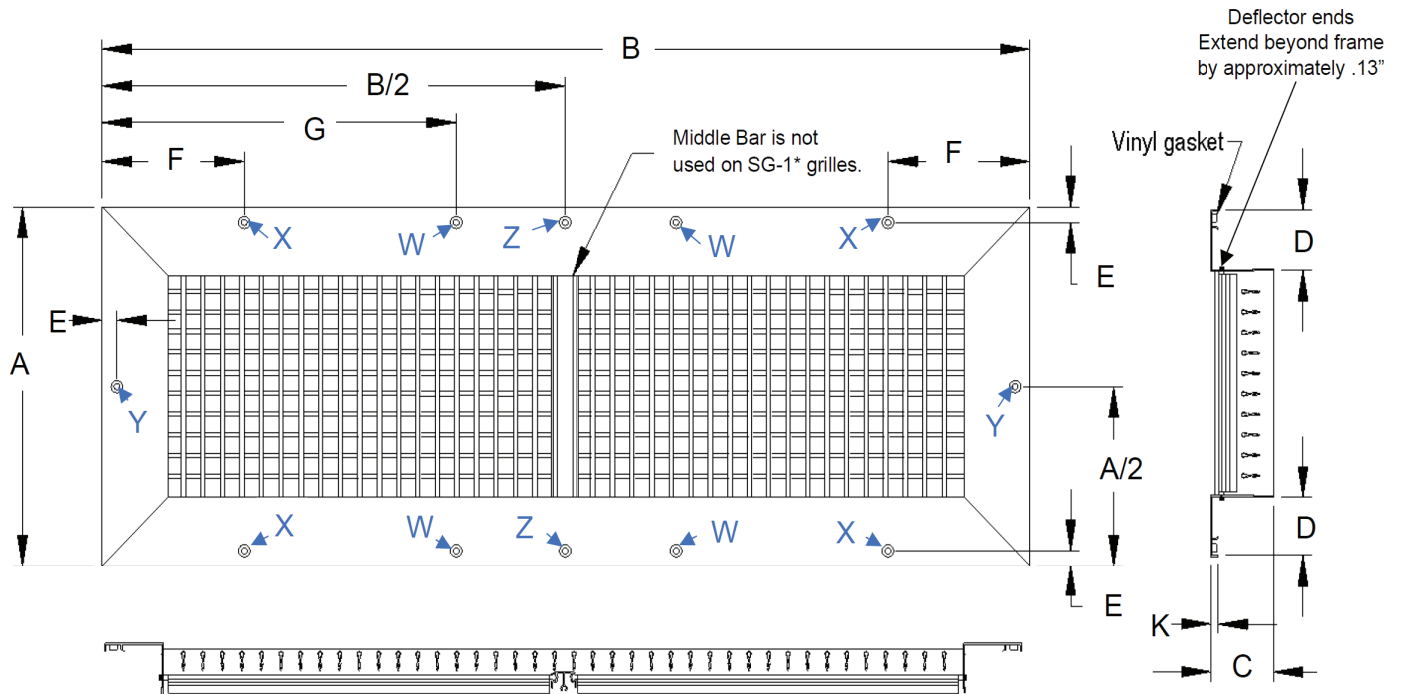
SUPPLY GRILLE	AIRFLOW CFM	DEFLECTION	VELOCITY	TOTAL PRESSURE	THROW
SG-2 SG-2W	800 CFM	0°	1053	.076" WC	37-52 ft.
		22.5°	1143	.1" WC	28-40 ft.
		45°	1428	.162" WC	20-29 ft.
	865 CFM	0°	1138	.054" WC	40-55 ft.
		22.5°	1236	.075" WC	31-42 ft.
		45°	1544	.113" WC	21-30 ft.
SG-3 SG-3W	885 CFM	0°	852	.054" WC	37-54 ft.
		22.5°	1075	.075" WC	35-49 ft.
		45°	1162	.113" WC	21-30 ft.
	1285 CFM	0°	1237	.108" WC	42-66 ft.
		22.5°	1359	.147" WC	35-50 ft.
		45°	1687	.249" WC	25-37 ft.
SG-5 SG-5W	1450 CFM	0°	968	.073" WC	51-73 ft.
		22.5°	1071	.103" WC	39-56 ft.
		45°	1331	.169" WC	28-40 ft.
	2000 CFM	0°	1336	.130" WC	61-86 ft.
		22.5°	1477	.188" WC	54-65 ft.
		45°	1835	.335" WC	33-46 ft.



Non-Ducted Supply Grille Throw Characteristics

SUPPLY GRILLE	AIRFLOW CFM	DEFLECTION	AK FACTOR	TOTAL PRESSURE	MAX. THROW
SG-10W	2682 CFM	0°	3.49	.044" WC	85 ft. (25.9m)
		22.5°	3.35	.049" WC	68 ft. (20.7m)
		45°	3.04	.074" WC	43 ft. (13.1m)
	3129 CFM	0°	3.49	.060" WC	91 ft. (27.7m)
		22.5°	3.35	.067" WC	73 ft. (22.3m)
		45°	3.04	.101" WC	46 ft. (14.0m)
	3576 CFM	0°	3.49	.078" WC	98 ft. (29.9m)
		22.5°	3.35	.087" WC	78 ft. (23.8m)
		45°	3.04	.132" WC	45 ft. (13.7m)
	4470 CFM	0°	3.49	.122" WC	109 ft. (33.2m)
		22.5°	3.35	.136" WC	87 ft. (26.5m)
		45°	3.04	.207" WC	55 ft. (16.76m)
	5364 CFM	0°	3.49	.175" WC	120 ft. (36.6m)
		22.5°	3.35	.196" WC	96 ft. (29.3m)
		45°	3.04	.298" WC	60 ft. (18.3m)

SUPPLY GRILLE	AIRFLOW CFM	DEFLECTION	AK FACTOR	TOTAL PRESSURE	MAX. THROW
SG-15W	5,740 CFM	0°	4.48	.122" WC	124 ft. (37.7m)
		22.5°	4.31	.136" WC	99 ft. (30.1m)
		45°	3.9	.207" WC	62 ft. (18.8m)
	6,888 CFM	0°	4.48	.175" WC	137 ft. (41.7m)
		22.5°	4.31	.196" WC	110 ft. (33.5m)
		45°	3.9	.298" WC	69 ft. (21.0m)
	8,036 CFM	0°	4.48	.238" WC	148 ft. (45.1m)
		22.5°	4.31	.267" WC	118 ft. (35.9m)
		45°	3.9	.406" WC	74 ft. (22.5m)
	9,184 CFM	0°	4.48	.288" WC	153 ft. (46.6m)
		22.5°	4.31	.337" WC	123 ft. (37.4m)
		45°	3.9	.474" WC	80 ft. (24.3m)
	10,332 CFM	0°	4.48	.366" WC	158 ft. (48.1m)
		22.5°	4.31	.454" WC	128 ft. (39.0m)
		45°	3.9	.542" WC	86 ft. (26.2m)



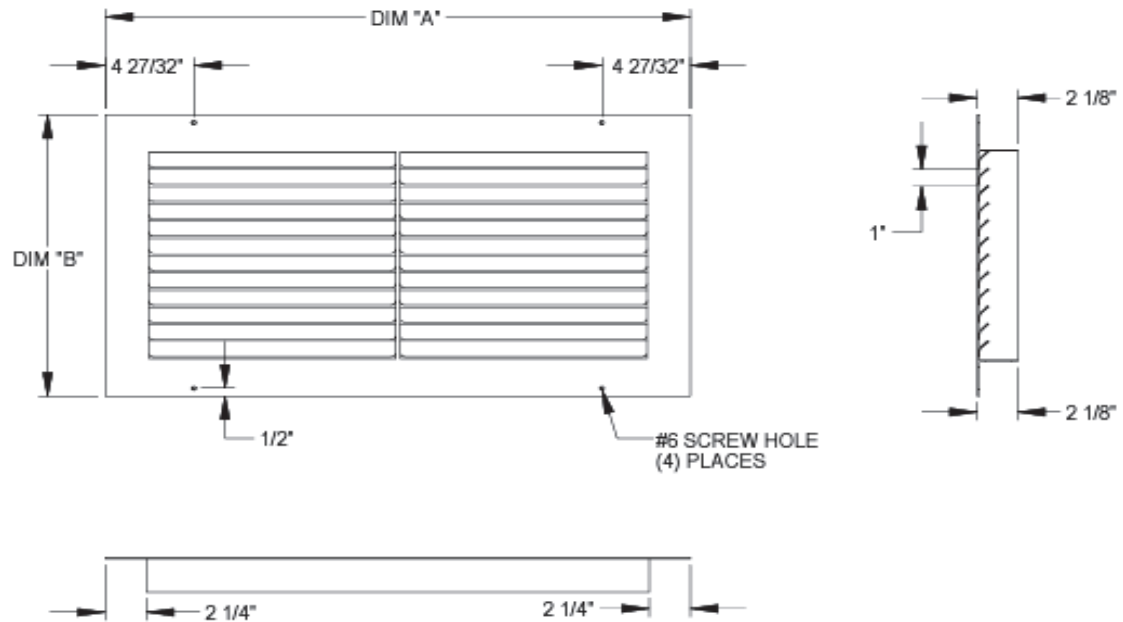
Part #	Finish	Nominal	Units	Holes	A	B	C	D	E	F	G	K	Weight
SG-1W	Silver	5" x 17"	W12	Y	8.69	20.69	1.44	2.00	.50	N/A	N/A	.19	3 lbs.
SG-2W	Silver	8" x 20"	W18-24	X	11.69	23.69	1.44	2.00	.50	5.84	N/A	.19	4 lbs.
SG-3W	Silver	8" x 28"	W30-36	X	11.69	31.69	1.44	2.00	.50	5.84	N/A	.19	5 lbs.
SG-5W	Silver	10" x 30"	W42-60	X	13.69	33.69	1.44	2.00	.50	5.84	N/A	.19	6.5 lbs.
SG-10W	Silver	16" x 43"	W90-150	X, Y, Z	20.00	47.00	1.44	2.00	.50	4.84	N/A	.25	13 lbs.
SG-10W-W	White	16" x 43"	W90-150	X, Y, Z	20.00	47.00	1.44	2.00	.50	4.84	N/A	.25	13 lbs.
SG-15W	Silver	16" x 55"	W180	W,X,Y	20.00	59.00	1.44	2.00	.50	5.84	21.61	.25	16.5lbs
SG-1W-A	Anodized	5" x 17"	W12	Y	9.25	21.25	2.13	2.25	.50	4.84	N/A	.25	3 lbs.
SG-2W-A	Anodized	8" x 20"	W18-24	X	12.25	24.25	2.13	2.25	.50	4.84	N/A	.25	4 lbs.
SG-3W-A	Anodized	8" x 28"	W30-36	X	12.25	32.25	2.13	2.25	.50	4.84	N/A	.25	5 lbs.
SG-5W-A	Anodized	10" x 30"	W42-60	X	14.25	34.25	2.13	2.25	.50	4.84	N/A	.25	6.5 lbs.
SG-10W-A	Anodized	16" x 43"	W90-150	X, Y, Z	20.00	47.00	2.13	2.25	.50	4.84	N/A	.25	13 lbs.
SG-15W-A	Anodized	16" x 55"	W180	W,X,Y	20.00	59.00	2.13	2.25	.50	4.84	21.61	.25	16.5lbs
SG-1	Silver	5" x 17"	W12	Y	6.69	18.69	1.44	1.00	.50	N/A	N/A	.19	3 lbs.
SG-2	Silver	8" x 20"	W18-24	X	9.69	21.69	1.44	1.00	.50	4.84	N/A	.19	4 lbs.
SG-3	Silver	8" x 28"	W30-36	X	9.69	29.69	1.44	1.00	.50	4.84	N/A	.19	5 lbs.
SG-5	Silver	10" x 30"	W42-60	X	11.69	31.69	1.44	1.00	.50	4.84	N/A	.19	6.5 lbs.
SG-1-A	Anodized	5" x 17"	W12	X	6.75	18.75	2.13	1.00	.45	2.75	N/A	.25	3 lbs.
SG-2-A	Anodized	8" x 20"	W18-24	X	9.75	21.75	2.13	1.00	.45	2.75	N/A	.25	4 lbs.
SG-3-A	Anodized	8" x 28"	W30-36	X, Z	9.75	29.75	2.13	1.00	.45	2.75	N/A	.25	5 lbs.
SG-5-A	Anodized	10" x 30"	W42-60	X, Z	11.75	31.75	2.13	1.00	.45	2.75	N/A	.25	6.5 lbs.

Silver and White are Painted Aluminum finishes. Anodized is an Extruded Aluminum finish. Vinyl gasket location may vary per grille design.

#6 pan head mounting screws supplied with grilles. Air deflectors are 4-way adjustable, and blade spacing is typically .66" to .75".

All dimensions $\pm .125"$ due to manufacturing tolerances.

"SGR" Series Supply Air Grilles



Grille Size Chart			
Grille part number	Use with unit(s)	Dim. "A"	Dim. "B"
SGR-3W (14"x 28")	HR35, WR35	32.000	18.000
SGR-5W (16"x 30")	HR36, WR36, HR58, WR58	34.000	20.000

Standard industry tolerances apply. Specs. are subject to change without notice.
Construction: Aluminum frame - white finish.

MIS-3913