

# SWIRL DIFFUSERS



Rev. 1

## STAMPED SWIRL DIFFUSERS

360° radial discharge pattern

### PRODUCT MODELS

Steel Construction

**DSW – Standard**

**DSWD – with 2" high neck**

**DSWI – Insulated (-R6 standard) - Pre-scored for collars**

Aluminum Construction

**ADSW – Standard Aluminum version of DSW**

**ADSWD – Aluminum version with 2" high neck**

**ADSWI – Aluminum insulated - Pre-scored for collars**

The Airvector® **DSW** and **ADSW** Stamped Swirl Diffusers deliver high-induction air distribution for VAV applications requiring efficient mixing and occupant comfort. The stamped swirl face creates a fixed 360° radial discharge pattern that promotes rapid temperature equalization and velocity reduction above the occupied zone while maintaining stable, quiet performance.

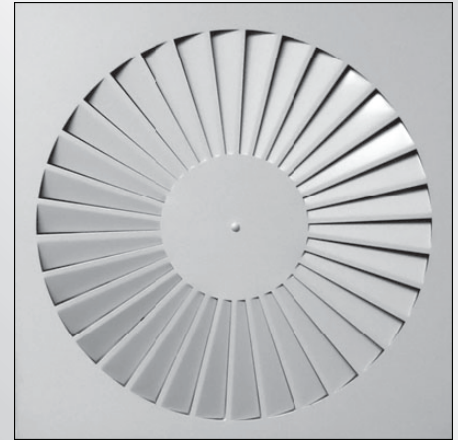
Available in steel (DSW) or aluminum (ADSW) construction, with optional 2" high neck and insulated configurations, the series adapts to a wide range of ceiling and airflow requirements.

### KEY FEATURES (ALL MODELS)

- High-induction swirl pattern for rapid air mixing
- Ideal for VAV systems
- Steel (DSW) or aluminum (ADSW) construction
- Screwdriver-adjustable neck-mounted OBD
- Optional 2" high neck
- Optional insulated models
- Standard white powder-coated finish (custom colors available)

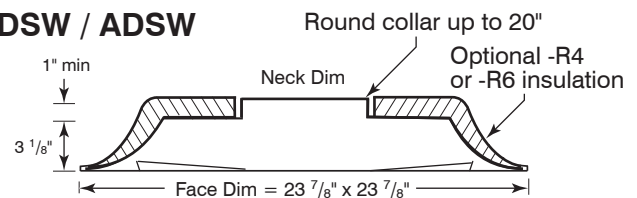
DSW/ ADSW Model #	Nominal Face Size	Actual Face Size B x B	Duct Size	Actual Neck Size
2406	24 x 24	23 <sup>7</sup> / <sub>8</sub> x 23 <sup>7</sup> / <sub>8</sub>	6	5 <sup>7</sup> / <sub>8</sub>
2408	24 x 24	23 <sup>7</sup> / <sub>8</sub> x 23 <sup>7</sup> / <sub>8</sub>	8	7 <sup>7</sup> / <sub>8</sub>
2410	24 x 24	23 <sup>7</sup> / <sub>8</sub> x 23 <sup>7</sup> / <sub>8</sub>	10	9 <sup>7</sup> / <sub>8</sub>
2412	24 x 24	23 <sup>7</sup> / <sub>8</sub> x 23 <sup>7</sup> / <sub>8</sub>	12	11 <sup>7</sup> / <sub>8</sub>
2414	24 x 24	23 <sup>7</sup> / <sub>8</sub> x 23 <sup>7</sup> / <sub>8</sub>	14	13 <sup>7</sup> / <sub>8</sub>
2416	24 x 24	23 <sup>7</sup> / <sub>8</sub> x 23 <sup>7</sup> / <sub>8</sub>	16	15 <sup>7</sup> / <sub>8</sub>
2420	24 x 24	23 <sup>7</sup> / <sub>8</sub> x 23 <sup>7</sup> / <sub>8</sub>	20	19 <sup>7</sup> / <sub>8</sub>

All dimensions in inches

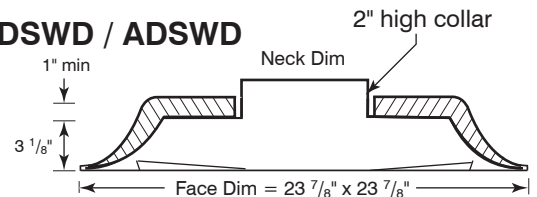


**DSW/ADSW**

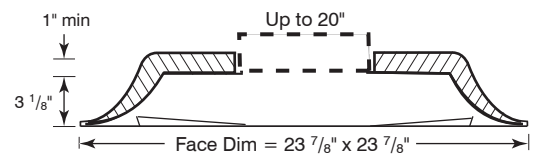
### DSW / ADSW



### DSWD / ADSWD



### DSWI / ADSWI



**DSWI fiberglass back.**

**DSW, DSWD, DSWI (steel)**  
**ADSW, ADSWD, ADSWI (aluminum)**  
**Stamped Swirl Diffusers**  
**24" x 24" face**

SIZE (inches)	Neck Velocity (fpm)	300	400	500	600	700	800	900	1000
	Velocity Pressure (in H <sub>2</sub> O)	.006	.010	.016	.022	.031	.040	.050	.062
6	CFM	59	79	98	118	137	157	177	196
	Total Pressure	.010	.018	.028	.040	.054	.071	.090	.111
	NC	-	-	-	-	-	18	21	24
	Throw (ft)	1-1-2	1-1-2	1-1-3	1-2-4	1-2-4	2-2-5	2-3-5	2-3-6
8	CFM	105	140	174	209	244	279	314	349
	Total Pressure	.017	.030	.047	.068	.092	.120	.152	.188
	NC	-	-	-	-	19	23	26	29
	Throw (ft)	1-2-3	1-2-4	2-3-5	2-3-6	2-4-7	3-4-7	3-5-8	3-5-8
10	CFM	164	218	273	327	382	436	491	545
	Total Pressure	.029	.051	.079	.114	.156	.203	.257	.318
	NC	-	15	22	27	31	35	38	41
	Throw (ft)	2-2-5	2-3-6	3-4-7	3-5-8	4-6-8	4-6-9	5-7-9	5-7-10
12	CFM	236	314	393	471	550	628	707	785
	Total Pressure	.048	.086	.134	.194	.264	.344	.436	.538
	NC	17	24	31	36	40	44	47	50
	Throw (ft)	2-4-7	3-5-8	4-6-8	6-7-9	5-7-10	6-8-11	7-8-11	7-8-12
14	CFM	321	428	535	641	748	855		
	Total Pressure	.082	.146	.228	.328	.446	.583		
	NC	24	32	38	43	47	51		
	Throw (ft)	3-5-8	4-6-9	5-7-10	6-8-11	7-8-12	7-9-12		
16	CFM	419	558	698	837				
	Total Pressure	.139	.247	.385	.555				
	NC	30	38	44	49				
	Throw (ft)	4-6-9	6-7-13	6-8-11	7-9-12				
20	CFM	650	870	1090					
	Total Pressure	.235	.418	.651					
	NC	32	40	46					
	Throw (ft)	5-7-10	6-8-14	7-9-15					

NC Noise Criteria Value based on 10 db room attenuation.

Throw Values are based on isothermal air and terminal velocities of 150 fpm 100 fpm, & 50 fpm respectively.

Total Pressure the sum of static pressure plus velocity pressure and is given in inches w.g.

**HOW TO ORDER DSW/ADSW**

**DSW-R4 2408 /W**

*MODEL SERIES*

Standard Plaque **DSW**

Plaque 2" Neck **DSWD**

Add prefix "A" for Aluminum.

*FINISH (OPTIONAL)*

Standard is White **/W**

See custom chart **/C**

for more

*NECK DIAMETER*

**06-08-10-12-14-16-20"**

*INSULATION (OPTIONAL)*

Standard is uninsulated

R4.2 Taped Insulation **-R4**

R6 Taped Insulation **-R6**

*FACE DIMENSIONS*

24" x 24" **24**

**HOW TO ORDER DSWI/ADSWI**

**DSWI /W**

*MODEL SERIES*

Swirl Diffuser **DSWI**

*FINISH (OPTIONAL)*

Standard is White **/W**

See chart for more