

# SQUARE DIFFUSERS



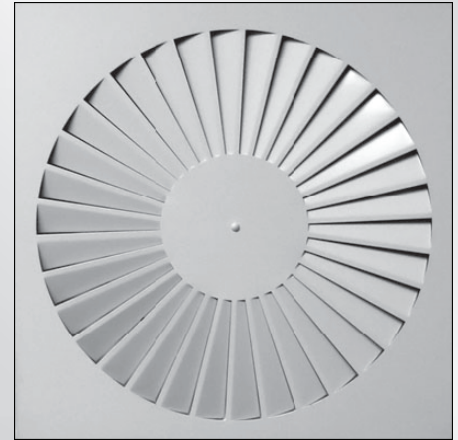
## MODELS DSW, DSWI

MODEL **DSW** - Swirl Pattern, Round neck

MODEL **DSWI** - R6 Insulated, Pre-scored for collars

The **DSW Series** supply diffusers are high induction diffusers recommended for both heating and cooling in variable air volume systems.

The **DSW series** provide a 360° radial air diffusion pattern ideal for applications that require high induction rates for rapid temperature and velocity equalization of the mixed air mass above the zone of occupancy.



**DSW**

### Features:

- Full face 24" x 24" for all neck sizes
- Optional 2" neck available for **DSW**
- Lay-in T-Bar ceiling mounting
- Heavy-gauge all-steel construction
- Ideal for VAV systems
- Powder paint coating - White (default) Custom colours avail.

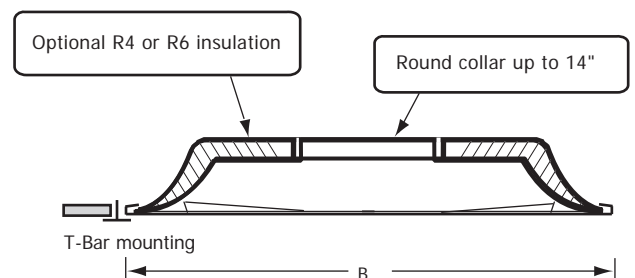
### Insulation:

**DSW** - Optional R4 or R6 insulation. R6 fiberglass insulation complies with A.S.T.M. E84 flame and smoke test. Only available on models with 24" x 24" face.

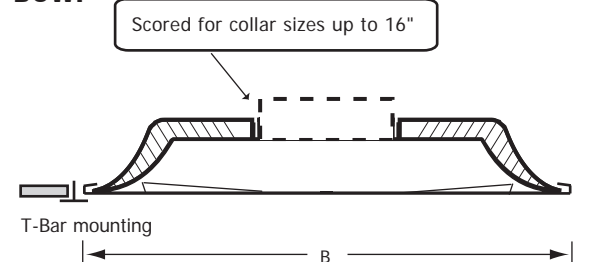
**DSWI**- R6 fiberglass insulation.

DSW 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>

### DSW



### DSWI



DSWI Model #	Nominal Face Size	Actual Face Size B x B
DSWI	24 x 24	23 <sup>7</sup> / <sub>8</sub> x 23 <sup>7</sup> / <sub>8</sub>

All dimensions in inches



DSWI fiberglass back.

# ENGINEERING PERFORMANCE DATA

## MODEL DSW

## SQUARE PANEL



24" x 24" face

SIZE (inches)	Neck Velocity (fpm)	400	500	600	700	800	1000	1100	1200	1400
	Velocity Pressure (in H <sub>2</sub> O)	.010	.016	.024	.031	.040	.062	.075	.090	.122
6	CFM	78	98	118	137	157	196	220	236	275
	Total Pressure	.024	.038	.056	.068	.101	.130	.152	.210	.314
	NC	< 20	< 20	< 20	< 20	20	24	30	33	38
	Throw (ft)	2-3-5	2-3-6	3-4-6	3-5-7	3-4-7	4-6-8	5-7-10	4-7-10	5-7-10
8	CFM	140	175	209	244	279	349	380	420	490
	Total Pressure	.030	.046	.068	.086	.115	.184	.218	.261	.332
	NC	< 20	< 20	< 20	27	31	38	41	44	46
	Throw (ft)	3-3-5	2-3-7	3-4-7	3-5-10	4-5-9	5-7-11	5-7-12	7-7-14	8-9-12
10	CFM	218	273	327	382	436	545	600	655	765
	Total Pressure	.044	.066	.114	.148	.189	.300	.359	.427	.495
	NC	< 20	21	29	36	38	42	44	46	55
	Throw (ft)	3-4-8	4-5-10	4-6-10	5-8-12	6-8-12	8-9-13	8-9-14	8-10-14	9-11-16
12	CFM	314	393	471	550	628	785	865	990	
	Total Pressure	.096	.138	.122	.272	.355	.558	.674	.778	
	NC	25	32	36	41	45	50	53	57	
	Throw (ft)	4-6-10	5-6-11	5-8-14	6-9-14	7-9-16	10-12-16	10-13-18	11-12-19	
14	CFM	425	530	635	743	850	1060			
	Total Pressure	.145	.205	.284	.410	.519	.777			
	NC	30	38	42	49	54	60			
	Throw (ft)	5-7-12	6-7-13	6-8-15	7-10-15	8-11-17	11-14-18			

NC 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**

**DSW-R4-2-S-W3 2408 /W**

**MODEL SERIES**  
Standard Plaque **DSW**  
Insulated Plaque **DSWI**

**INSULATION (OPTIONAL)**  
Standard is uninsulated  
R4.2 Taped Insulation **-R4**  
R6 Taped Insulation **-R6**

**COLLAR HEIGHT (OPTIONAL)**  
Standard is 1", no need to specify  
2" Fixed Collar **-2**

**PACKAGING (OPTIONAL)**  
Standard is 2 per box  
Single Box **-S**

**FINISH (OPTIONAL)**  
Standard is White **/W**  
See custom chart **/C**  
for more

**NECK DIAMETER**  
**06-08-10-12-14"**

**FACE DIMENSIONS**  
24" x 24" **24**

**DIRECTION (OPTIONAL)**  
Standard is 4 Way -  
1 Way **-W1**  
2 Way Corner **-WC**  
2 Way Opposed **-WO**  
3 Way **-W3**

**HOW TO ORDER DSWI**

**DSWI /W**

**MODEL SERIES**  
Swirl Diffuser **DSWI**

**FINISH (OPTIONAL)**  
Standard is White **/W**  
See chart for more