

SQUARE DIFFUSERS

MODELS DF3, DF3D, DF3I, & DA3 3 CONE DIFFUSERS

- MODEL DF3 - Fixed horizontal pattern
 MODEL DF3D - Fixed horizontal pattern, 2" high collar
 MODEL DF3I - Fixed horizontal pattern, Insulated
 MODEL DA3 - Adjustable horizontal pattern

Airvector's 3 Cone Supply Diffusers are recommended for heating, ventilating, and cooling. The diffusers' integrated round-neck-to-square-face construction can provide a 360° horizontal air diffusion pattern similar to a full round diffuser. The DA3 diffuser allows for independent adjustable horizontal deflection. The DF3I is supplied with R6 insulation and does not include an integrated collar. R4 and R6 are optional for DF3, DF3D, and DA3.

High diffusion induction rates result in rapid temperature and velocity equalization of the mixed air mass well above the zone of occupancy. Horizontal performance assures confident use of a cooling temperature differential of 30° and greater at a predicted low air motion of 35 fpm in the zone of occupancy. DF3 supply diffusers perform efficiently with air loadings of 6 to 30 air changes per hour (based on a 10 ft. ceiling height), and a sound level range of NC 25 to 35.

Highlights

- Heavy-gauge all-steel construction
- Powder paint coating - White (Custom Finishes Avail.)
- Matching N4 and N5 OBDs available
- OBD accessible through diffuser face

Listed Size	Neck Dia	Nominal Face Size	Overall Face Size "B"	Drywall Ceiling Opening
1206*	6	12 x 12	11 ³ / ₄ x 11 ³ / ₄	10 ¹ / ₂ x 10 ¹ / ₂
1208*	8	12 x 12	23 ³ / ₄ x 23 ³ / ₄	10 ¹ / ₂ x 10 ¹ / ₂
2406	6	24 x 24	23 ³ / ₄ x 23 ³ / ₄	22 ¹ / ₂ x 22 ¹ / ₂
2408	8	24 x 24	23 ³ / ₄ x 23 ³ / ₄	22 ¹ / ₂ x 22 ¹ / ₂
2410	10	24 x 24	23 ³ / ₄ x 23 ³ / ₄	22 ¹ / ₂ x 22 ¹ / ₂
2412	12	24 x 24	23 ³ / ₄ x 23 ³ / ₄	22 ¹ / ₂ x 22 ¹ / ₂
2414*	14	24 x 24	23 ³ / ₄ x 23 ³ / ₄	22 ¹ / ₂ x 22 ¹ / ₂

* Only available with DF3 and DA3

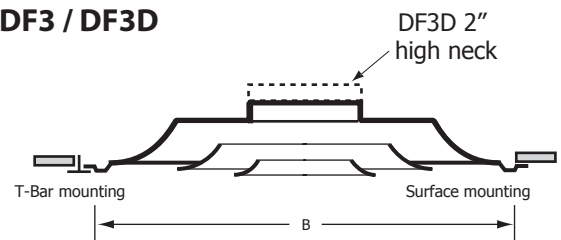


DF3

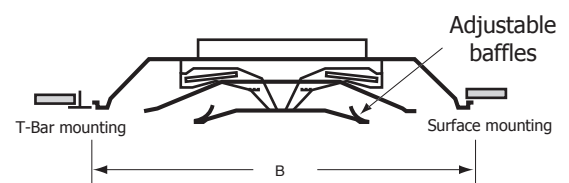
HANDY FEATURES

- One standard model suits both T-Bar and Drywall installations using rigid ducts
- Compatible with Airvector's exclusive Easy Install PF frame
- Core is easily removable without tools to facilitate access to duct.

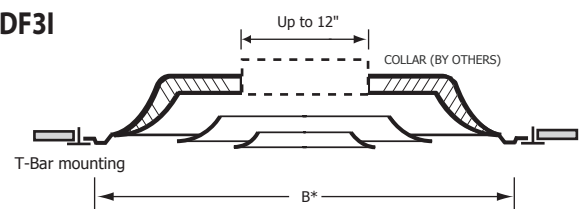
DF3 / DF3D



DA3



DF3I



ENGINEERING PERFORMANCE DATA

MODELS DF3, DF3D, DF3I, & DA3 ³ CONE



12" x 12" face

SIZE (inches)	Neck Velocity (fpm)	400	500	600	700	800	1000	1200	1400	1600
	Velocity Pressure (in H ₂ O)	.010	.016	.022	.031	.041	.062	.090	.122	.160
6	CFM	78	98	118	137	157	196	235	274	313
	Total Pressure	.02	.03	.04	.06	.07	.10	.16	.22	.29
	NC	< 20	< 20	< 20	< 20	< 20	25	29	34	40
	Throw (ft)	2-3-6	3-4-7	4-5-9	4-5-10	5-6-11	6-8-12	7-9-13	8-10-15	9-11-16
8	CFM	140	175	209	244	279	349	419	489	559
	Total Pressure	.03	.04	.06	.07	.09	.14	.20	.28	.38
	NC	< 20	< 20	< 20	< 20	< 20	29	35	41	45
	Throw (ft)	2-4-7	3-5-9	4-7-10	5-8-11	6-9-12	7-10-14	8-12-17	10-12-18	11-14-20

24" x 24" face

SIZE (inches)	Neck Velocity (fpm)	400	500	600	700	800	1000	1200	1400	1600
	Velocity Pressure (in H ₂ O)	.010	.016	.022	.031	.041	.062	.090	.122	.160
6	CFM	78	98	118	137	157	196	235	274	313
	Total Pressure	.02	.03	.04	.05	.07	.10	.14	.19	.24
	NC	< 20	< 20	< 20	< 20	< 20	22	28	32	36
	Throw (ft)	1-2-4	1-3-4	2-3-5	2-3-6	3-4-7	4-6-8	5-7-10	6-9-11	7-9-12
8	CFM	140	175	209	244	279	349	419	489	559
	Total Pressure	.02	.03	.04	.05	.08	.10	.15	.20	.25
	NC	< 20	< 20	< 20	< 20	< 20	26	31	36	41
	Throw (ft)	2-3-5	2-3-7	3-4-8	3-5-8	4-6-9	5-7-11	6-9-13	7-10-14	8-11-17
10	CFM	218	273	327	382	436	545	654	763	872
	Total Pressure	.02	.03	.04	.05	.08	.12	.17	.24	.30
	NC	< 20	< 20	< 20	< 20	22	29	34	38	43
	Throw (ft)	3-4-6	4-5-8	4-6-10	5-7-12	6-8-14	7-9-15	8-11-16	9-12-17	10-13-19
12	CFM	314	393	471	550	628	785	941	1099	1246
	Total Pressure	.02	.04	.05	.07	.09	.14	.20	.27	.36
	NC	< 20	< 20	< 20	20	23	39	36	41	46
	Throw (ft)	4-5-9	5-6-10	6-7-11	6-8-13	7-9-15	8-11-18	10-13-21	12-16-22	13-18-21
14	CFM	492>	615	738	861	984	1230	1476	1722	1968
	Total Pressure	.03	.04	.06	.08	.10	.18	.23	.30	.40
	NC	< 20	< 20	< 20	21	25	33	38	43	48
	Throw (ft)	4-6-10	5-6-11	6-8-14	7-10-16	8-11-18	10-14-20	12-16-22	14-19-24	15-20-26

NC Value based on 10 db room attenuation.

Throw Values are based on isothermal air and terminal velocities of 150 fpm, 100 fpm & 75 fpm respectively.

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

HOW TO ORDER DF3 & DF4 SERIES

DF3-R4-S-W3 2408 /W

MODEL SERIES

- 3 Cone Fixed **DF3**
- 3 Cone Fixed, 2" Neck, ... Single-Box **DF3D**
- 3 Cone Adjustable **DA3**
- 4 Cone Fixed **DF4**
- 4 Cone Fixed, 2" Neck, ... Single-Box **DF4D**
- 4 Cone Adjustable **DA4**

INSULATION (OPTIONAL)

Standard is uninsulated

- R4.2 Taped Insulation **-R4**
- R6 Taped Insulation **-R6**

PACKAGING (OPTIONAL)

Standard is 2 per box

- Single Box **-S**

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

NECK DIAMETER
In Inches
06-08-10-12-14"

FACE DIMENSIONS
12" x 12" **12**
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 DF3I & DF4I

DF3I-S /W

MODEL SERIES

- 3 Cone **DF3I**
- 4 Cone **DF4I**

PACKAGING (OPTIONAL)

Standard is 2 per box

- Single Box **-S**

FINISH (OPTIONAL)

Standard is White (**/W**)

See chart for more