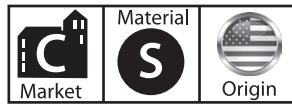


Series OPD T-bar Plaque Diffuser



- Heavy guage plaque with corner radii
- Steel construction
- 360° diffusion pattern
- Fixed collar and no collar models
- R1 insulation blanket (see p. 230)
- White finish
- Made in the U.S.A.



Associated Series:

Series OPD NI

- OPD with no insulation

Series OPD NI-38D

- OPD with no insulation + installed Series 3800 damper

Series OPD 38D (or OPD 6-38D)

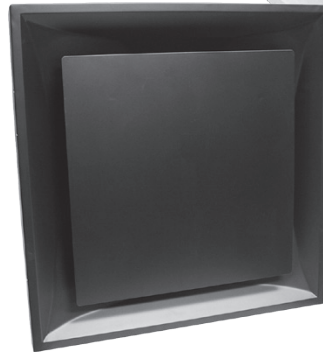
- OPD + R1 (R6) insulation blanket and installed Series 3800 damper

Series OPD P6

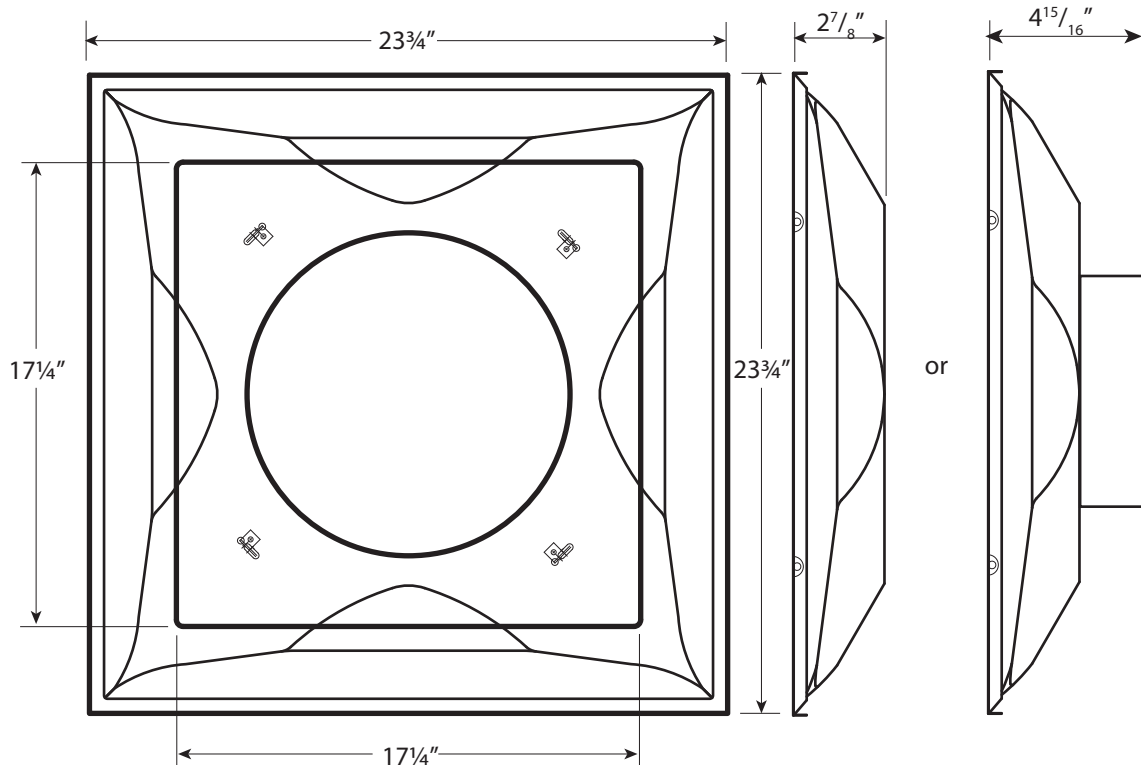
- OPD + R6-rated fiberglass plenum

Series OPDANIBL

- OPD with no insulation and Black finish



Dimensional Drawing



Commercial
T-bar (lay-in)

Performance Data, Series OPD

Collar Size ↓	Neck Velocity →	400	500	600	700	800	900	1000	1200	1400	1600
6" An .20 Ak .78	Cfm	80	100	120	135	155	175	195	240	280	320
	Ps	<.01	.01	.02	.02	.03	.04	.04	.06	.09	.11
	Nc	<25 dB	<25 dB	<25 dB	<25 dB	<25 dB	<25 dB	<25 dB	25 dB	30 dB	35 dB
	Throw	2	3	3	4	4	5	5	6	7	8
7" An .27 Ak .88	Cfm	110	135	160	190	200	240	270	320	380	420
	Ps	.01	.01	.02	.03	.03	.04	.05	.07	.10	.13
	Nc	<25 dB	<25 dB	<25 dB	<25 dB	<25 dB	<25 dB	25 dB	30 dB	35 dB	40 dB
	Throw	3	4	5	5	6	7	8	9	11	13
8" An .35 Ak .92	Cfm	140	175	210	245	280	320	350	420	490	560
	Ps	.01	.02	.02	.03	.04	.05	.06	.09	.12	.15
	Nc	<25 dB	<25 dB	<25 dB	<25 dB	<25 dB	25 dB	30 dB	35 dB	35 dB	40 dB
	Throw	4	5	6	7	7	8	9	11	13	15
9" An .44 Ak 1.20	Cfm	180	220	270	310	350	390	440	530	610	700
	Ps	.01	.02	.03	.04	.05	.06	.07	.10	.15	.18
	Nc	<25 dB	<25 dB	<25 dB	<25 dB	25 dB	30 dB	35 dB	40 dB	40 dB	45 dB
	Throw	5	6	7	8	10	11	12	15	17	19
10" An .54 Ak 1.20	Cfm	220	270	325	380	435	490	545	655	765	870
	Ps	.01	.02	.03	.04	.05	.07	.08	.12	.17	.21
	Nc	<25 dB	<25 dB	<25 dB	<25 dB	25 dB	30 dB	35 dB	35 dB	40 dB	45 dB
	Throw	6	7	9	10	11	13	14	17	20	22
12" An .78 Ak 1.65	Cfm	320	390	470	550	630	710	790	940	1100	1250
	Ps	.02	.02	.03	.05	.06	.07	.09	.13	.18	.23
	Nc	<25 dB	<25 dB	<25 dB	25 dB	30 dB	35 dB	35 dB	40 dB	45 dB	>45 dB
	Throw	6	8	9	11	12	14	15	18	21	24
14" An 1.07 Ak 2.06	Cfm	430	540	640	750	860	960	1075	1275	1500	1700
	Ps	.02	.04	.05	.07	.09	.12	.14	.21	.28	.35
	Nc	<25 dB	<25 dB	<25 dB	25 dB	30 dB	35 dB	40 dB	40 dB	45 dB	>45 dB
	Throw	7	8	10	12	13	15	16	19	23	25

Terminal velocity = 75 fpm

An = Neck (collar) Area. Measured in square feet.

Ak = Effective Area. The calculated area of the outlet based on average, measured velocity between fins. Measured in square feet.

Neck Velocity = Velocity of air flow through the nominal area of the duct connection to the diffuser assembly. Measured in feet per minute.

Cfm = Air flow rate. Volume of air moving past a given plane per unit of time. Measured in cubic feet per minute.

Ps = Static Pressure. The normal, outward force of air within a duct. Measured in inches of H₂O.

Nc = Discharge acoustical noise, based on 10 dB room absorption. Measured to the nearest 1.0 dB

Throw = Distance the air stream travels from the outlet to a point where terminal velocity is reached. Measured in feet.