

## MODEL PHV, PHV-A • 24 X 24

NECK SIZE	Neck Velocity (FPM)	400	500	600	700	800	900	1000	1100	1200	1300
	$P_V$	.01	.02	.02	.03	.04	.05	.06	.08	.09	.11
12" DIA	CFM (Total)	310	390	470	550	630	710	790	860	940	1020
	CFM (Horizontal)	200	250	310	360	410	460	510	560	610	660
	CFM (Vertical)	110	140	160	190	220	250	280	300	330	360
	$P_T$	.02	.03	.05	.07	.09	.11	.14	.17	.20	.24
	NC	<20	<20	<20	21	25	29	32	35	38	40
	Horiz Throw (FT)	1-3-6	2-3-7	3-4-8	3-4-9	4-5-11	4-6-12	4-7-13	5-7-15	6-8-16	7-9-18
	Vertical Proj (FT)	9	11	11	12	13	14	15	15	16	17
14" DIA	CFM (Total)	430	530	640	750	860	960	1070	1180	1280	1390
	CFM (Horizontal)	260	320	380	450	520	580	640	710	770	830
	CFM (Vertical)	170	210	260	300	340	380	430	470	510	560
	$P_T$	.03	.04	.06	.08	.10	.13	.16	.19	.23	.27
	NC	<20	<20	<20	<20	23	27	31	35	38	41
	Horiz Throw (FT)	2-4-7	3-4-8	4-5-11	4-6-12	5-7-14	5-7-15	6-9-17	6-9-19	7-10-21	8-11-23
	Vertical Proj (FT)	12	13	14	15	16	17	18	19	20	21

**PERFORMANCE NOTES:**

- **FPM** - speed of air as Feet Per Minute
- **Neck Velocity** - velocity of air as measured in the supply duct (feet per minute)
- **CFM** - Cubic Feet per Minute of air (Volumetric flow rate)
- **$P_T$**  - Total pressure, inches w.g.
- **$P_V$**  - Velocity pressure, inches w.g.
- **$P_S$**  - Static pressure, inches w.g. Can be calculated as:  $P_S = P_T - P_V$
- **NC** - Noise Criteria based on 10 dB room attenuation (ref: 10-12 watts). For Model PHV-A with a fully closed down-blow damper, add +7 NC.
- Total CFM entering the diffuser is shown, with the proportion of air indicated for both the horizontal and vertical directions, with a fully open down-blow damper.

- **Horizontal Throw** is shown, in feet, to Terminal Velocities,  $V_T$ , of 50,100,50 fpm.
- **Vertical Projection** is shown, in feet, to a Terminal Velocity,  $V_T$ , of 50 fpm for isothermal air, with a fully open down-blow damper.  
For a heating differential = 20°F, reduce projection distance x .70.  
For a cooling differential = 20°F, increase projection distance x 1.30

**Test Standards**

- ANSI/ASHRAE Standard 70: "Method of Testing the Performance of Air Outlets and Air Inlets"