

"2 x 2" SQUARES

Thermally Powered Diffusers

MODELS AVAILABLE:

SC, SCW, SCAH, PCAH, Pneumatic & Special Orders

DESCRIPTION:

- 6"/8"/10"/12" Inlet Duct Connections Available
- Provides VAV Cooling Control with Adjustable Constant Volume Heating Control.
- Wax Type VAV Thermostatic Actuator
- Wax Type Heating Control Thermostatic Actuator
- Throw values (ft) are based on following terminal velocities:
 - Maximum 150 FPM
 - Typical 100 FPM
 - Minimum 50 FPM

Pt is total pressure (inch WG)

S - SOLID CENTER PANEL

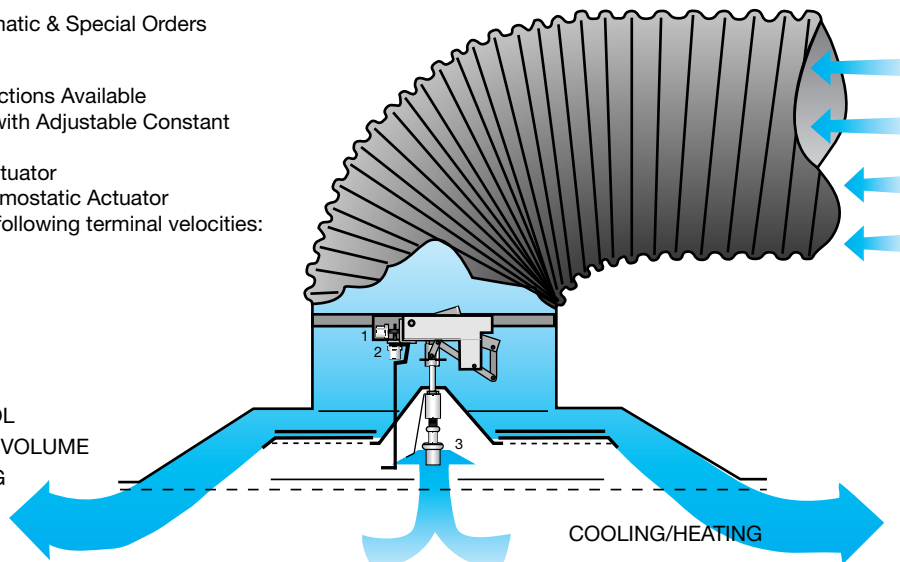
C - VAV COOLING CONTROL

AH - ADJUSTABLE HEATING VOLUME

AH/I - FULL CLOSED HEATING

W - FULL OPEN WARM-UP

P - PERFORATED FACE



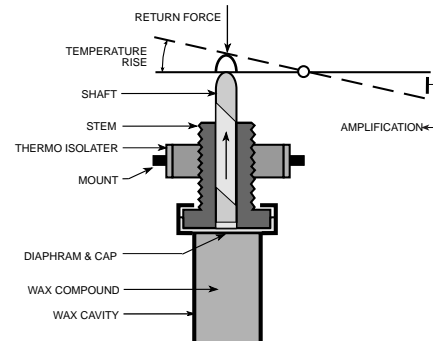
"2 x 2" SQUARE DIFFUSER PERFORMANCE

Listed Size	Inlet SP In. WG	Max. CFM	Throw @ Max. CFM			Throw @ 25% of CFM		NC @ Max. CFM*
			V _t 50	V _t 100	V _t 150	V _t 50	V _t 100	
6"	.05	85	5	3	1	3	1	*
	.10	120	6	3	2	3	2	20
	.15*	150	7	4	2	4	3	24
	.20	170	8	5	3	6	4	28
	.25	220	8	6	5	7	4	33
8"	.05	160	6	4	2	4	2	*
	.10	225	8	5	3	5	3	20
	.15*	275	9	5	4	6	4	25
	.20	320	10	6	5	8	5	29
	.25	355	12	7	6	9	6	33
10"	.05	250	7	4	3	5	3	*
	.10	355	9	5	4	6	4	22
	.15*	450	11	6	5	7	4	26
	.20	500	12	7	6	8	5	29
	.25	580	13	8	7	10	7	32
12"	.05	365	8	5	4	6	4	*
	.10	520	11	7	6	8	5	23
	.15*	650	12	7	6	8	6	27
	.20	740	14	8	7	10	7	32
	.25	820	15	10	9	11	8	36
	.30	890	17	11	10	12	9	40

* Denotes nominal rating
 NC based on L_w (10⁻¹² watts reference) -10db
 Tested in accordance with ANSI /ASHRAE 70-1991, ANSI S12.31, ARI890-94, ISO5219 and ISO 3741

ROOM TEMPERATURE SENSING ELEMENT

The thermal actuator allows the transformation of heat energy into mechanical energy via the movement of a diaphragm type actuator which in turn pushes a moveable shaft. This transformation is based on the increase in volume of a thermoactive expansion material which is heated and changes from a solid to a liquid state. The resultant force developed by this expansion is transmitted to a moveable shaft which rises along a curve related to temperature as it affects the thermoactive core material.



PERFORMANCE AIR PRODUCTS, INC.

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Performance Air Products, Inc., warrants the thermal diffuser for a period of 10 years. The diffusers shall be free from defects in material and workmanship. We agree to repair or replace any defective parts. This warranty excludes shipping charges and field labor required to exchange, test or service the diffuser.