The Pyle-National Company

Multi-Vent Division
1363–78 N. Kostner Ave.
Chicago 51, Illinois

Sales Engineers and Agents
in Principal Cities of
U. S. and Canada

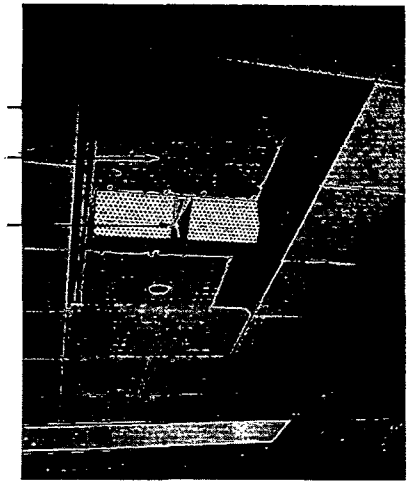
MULTI-VENT* *LOW VELOCITY* AIR DIFFUSION PANELS

Multi-Vent installations are simple, quick to balance and easy to clean. They have been applied with remarkable results to almost every type of building, new or old, and are particularly well adapted to the *lower ceilings and movable partitions* in modern architecture.

Panel Frame . . . installed in the bottom of air supply duct or plenum.

Control Plate . . . supporting one or more valves per panel may be easily lowered to provide ready access to duct above for cleaning.

Pressure Displacement Air Valve . . . single adjusting screw raises, and lowers a valve plate above opening in control plate to regulate volume of air flow from duct into dual V shaped primary distribution sections, the design of which insures even distribution of air over the entire perforated area below panel.



Concealed Multi-Vent Panel exposed by removal of six squares of metal acoustical ceiling.

11 Outstanding Advantages

1. Radiant Panel Heating and Cooling Effect Adds to the Comfort Factor—The large areas of the ceiling which function as distribution plates for the Multi-Vent panels are heated or cooled to the temperature of the supply air.

2. Complete Absence of Strong Air Streams or Blow Eliminates All Air Direction Adjustments by Diffusing Vanes or Baffles: With Multi-Vent duct velocities are so radically reduced (within the diffuser itself) . . . diffusion is so rapid, thorough and wide-spread . . . that no air movement in excess of ASHVE comfort zone requirements exists more than six inches away from the perforated distribution plate.

3. No Deflection Problems to Restrict Location or Capacity of Outlet Panel: With Multi-Vent the location and the capacity of the diffuser can be determined solely by load considerations assuring maximum effectiveness and efficiency. The proximity of seating locations or the relative positions of partitions and lighting fixtures—which must be a major consideration in locating high velocity diffusers to avoid drafts—need not be considered with Multi-Vent regardless of ceiling heights.

4. Complete Freedom of Partition Movement With No Panel Alteration or Adjustment Necessary: In resizing office or store space Multi-Vent panels can even be bisected by partitions with no possibility of draft hazards or other undesirable air diffusion problems.

5. No Change in Air Diffusion Patterns or Cold Drop When Desired Volume of Air Delivered is Varied: Multi-Vent's adjustable pressure displacement valve can be easily set for delivery of various amounts of air without disturbing the

**This application of low velocity, pressure displacement air diffusion is fully protected by patents. Only with Multi-Vent can you enjoy its benefits. Multi-Vent is the registered trade mark of the Pyle-National Co., Chicago, air distribution systems and parts thereof.*

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balance of the overall system. Neither single panel adjustments to suit occupants special requirements nor substantial reduction or increase of air capacity at source to meet seasonal demands will in any way affect the desired air flow pattern.

6. 40 Per Cent Higher DTD Will Meet Comfort Zone Requirements: Multi-Vent will permit raising the usual 15 deg Diffusion Temperature Differential to as high as 25 deg (with an 8 ft ceiling for example). Thus 40 percent less air need be used to handle a given load making possible substantial economies in ducts, fans, filters and coils.

7. No Protruding Outlets to Interfere with Style and Location of Lighting Fixtures or with Interior Ceiling Design—Multi-Vent panels are completely concealed in metal acoustical ceilings. Installed flush in any other type ceiling, Multi-Vent is less conspicuous than diffusers of any other make.

8. Exceptional Uniformity and Control of Room Temperature: Multi-Vent can achieve a temperature differential of as little as 1 deg within the comfort zone in all seasons . . . and 2 deg is guaranteed. This insures *true* air conditioning comfort and will meet the most exacting air conditioning requirements for scientific research and industrial processing.

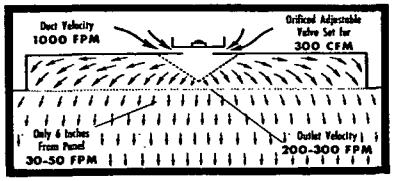
9. More Room Air Changes Per Hour With Less Air Motion: Multi-Vent is designed to handle the greatest amount of air in proportion to room size and therefore is particularly well suited to locations having high load or high ventilating requirements.

10. Elimination of Dirt Impingement on Ceiling and Wall Surfaces Reduces Costly Redecorating—Dirt Particles are not driven into paint and plaster by horizontal high velocity primary air streams, but are deposited gently downward on easy-to-clean furniture and floor surfaces.

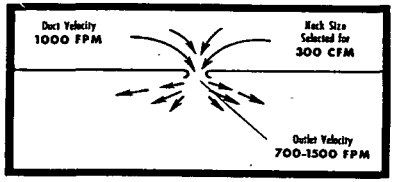
11. Complete absence of the sound of rushing air.

* See foot note on page 1280.

MULTI-VENT*—LOW VELOCITY DISTRIBUTION *BY DISPLACEMENT*



OTHER DIFFUSERS—DISTRIBUTION *BY HIGH VELOCITY INJECTION*



Panel Type	Panel Frame Sizes—Inches	No. of Air Valves	Maximum CFM Capacity
MVAR-122-1	12 x 24	1	75†
MVAR-123-2	12 x 36	2	150†
MVAR-124-2	12 x 48	2	150†
MVAR-125-3	12 x 60	3	225†
MVAR-126-3	12 x 72	3	225†
MVAR-244-1	24 x 48	1	300†
MVAR-245-1	24 x 60	1	300†
MVAR-246-1	24 x 72	1	300†
MVAR-364-1	36 x 48	1	300†
MVAR-365-1	36 x 60	1	300†
MVAR-365-2	36 x 60	2	600†
MVAR-366-1	36 x 72	1	300†
MVAR-366-2	36 x 72	2	600†

Special sizes to accommodate lighting or ceiling decoration are available.

† Allowable cfm per sq ft of panel area must be determined by DTD and ceiling height. Write for selection data.

Standard types *with perforated ceiling plate* for plaster or fibre ceiling are listed above. Panels are also supplied *less perforated plate* for use in metal acoustical ceilings—designated MVAMC.

Application data will be furnished on request.