

V-Series Fabric Diffuser Application Guide



ductsox.com

DSFLWP0118 © 2018 DuctSox Corp.

V-Series Fabric Diffuser

Application Guide



Directional displacement V-Series diffusers are the latest technology in fabric diffusers to enhance control of potentially hazardous airborne contaminants commonly found in laboratories and healthcare facilities.

Scientists, physicians, patients and visitors can be exposed and become ill from inhalation of airborne contaminants when working with biohazards or exposed to sick, infected and contagious people. Traditional air supply systems mix and recirculate air within a space ensuring that all people are exposed. Conversely, the new and unique V-Series

diffusers use directional displacement that helps control the dispersion of air to more effectively dilute and remove airborne contaminants. This maximizes protection for people while minimizing the volume of airflow and cost of operation airflow. The V-Series is designed to maximize control of airflow at the lowest possible air change rates of 2 to 12 air changes per hour (2-12 ACH) in new or renovated labs, healthcare environments and critical workspaces.

FEATURES

- 360° Airflow Coverage
- Directional Displacement
- Low Flow Supports Environments
- Operating as Low as 2 Air Changes per Hour (ACH)
- Proven Performance
- Low Flow Control of Airborne Pathogens
- Removable Fabric Face
- Ventilation Effectiveness Verified
- Maintenance Elements Accessible
- Below the Ceiling
- Up to 70% Recycled Content

BENEFITS

- Creates optimum airflow patterns favorable for labs and healthcare critical workspaces
- Capability to direct and customize airflow patterns to maximize ventilation effectiveness
- Enhances dilution and removal of airborne contaminants to improve safety and better protect occupants
- Able to eliminate undesirable air currents that might affect safety and occupant comfort
- Reduce airflow requirements and energy consumption up to 50%

Labs and Critical Workspaces

- Chemistry
- Biosafety
- Biochemistry
- Pathology Labs
- Genetics Labs
- Engineering Labs

- Nanotechnology Labs
- Equipment and Physics Labs
- Clinical and Medical
- Teaching Labs
- Animal Labs

V-Series diffusers can be located and configured to deliver the required airflow in the most efficient placement to direct and help remove airborne contaminants with lower total flow.





Hospitals and Healthcare Facilities

- Blood and Urine
 Sample Analysis
- Infection Control Rooms
- Tuberculosis Isolation Rooms
- Immunocompromised Patient Rooms
- Patient Treatment Rooms

The V-Series diffuser combined with a local exhaust system can be used to create proper airflow patterns that enhance protection for sick patients and minimize exposure to otherwise healthy doctors, nurses, staff and visitors.





Compromised Patient

Contagious Patient

Directional displacement can also be deployed in patient and visitor waiting areas to provide airflow patterns that help minimize exposure and cross contamination between sick and healthy people.



Patient Waiting Room

Special Labs and Procedure Spaces

- Gross Anatomy Labs
- Forensic and Autopsy Spaces
- Animal Procedure Rooms and Vivarium
- Aquatic Labs

Areas that rely primarily on dilution ventilation can benefit from implementation of V-Series diffusers that enable the ability to control and direct airborne hazards away from people and processes. Directional displacement improves ventilation effectiveness to more quickly remove contaminants and minimize the duration and concentration of exposure. Traditional induction type diffusers mix the air and increase turbulence that reduces the ability to dilute and remove the airborne contaminants.



Other Applications

- Doctor Offices and Veterinary Clinics
- 3-D Printer Spaces
- Mechanical Shops
- Art and Maker Spaces

V-Series diffusers can use up to 50% less airflow improving ventilation effectiveness compared to common induction type, air supply diffusers.

The DuctSox Approach

DuctSox provides unique cost-effective ventilation solutions through a process that is: Responsive > Consultative > Adaptable

For more information, go to www.ductsox.com or call us at 1-866-382-8769.

Products may be covered by one or more patents: www.ductsox.com/patents DSVSAG0419 © 2019 DuctSox Corp A Subsidiary of Rite-Hite Holding Corporation

DuctSox Corporation 4343 Chavenelle Rd Dubuque, IA 52002 Phone: 563-588-5300 Toll-free: 866-382-8769 Fax: 563-588-5330

ductsox.com

