



TEXTILE AIR DISPERSION PRODUCTS



**DUCTSOX**<sup>®</sup>  
INTERNATIONAL



## Textile Air Dispersion Systems

DuctSox Products are Fabric Ductwork and Diffuser Systems used for heating, cooling, refrigeration, or ventilation. They are a cost effective, aesthetically attractive alternative to metal ductwork and diffusers.

DuctSox offers the best products, design, and sales support in our industry. We strive to lead through a commitment to quality, service, and innovation. DuctSox Products have been accepted within key industry organizations such as ASHRAE, Underwriters Laboratories (UL), International Code Council (ICC-AC167), British Standards Institute (Bs), German Institute for Standardization (DIN), Chinese National Standards (Gb), Australia/New Zealand Building Standards (As-NZs) and many other building code authorities throughout the world.

Whether industrial, retail, education, commercial, government, warehousing, laboratory, food processing, temporary or permanent, DuctSox offers a proven choice.



## BENEFITS

- ▶ Improved air distribution
- ▶ Significantly lower cost than metal
- ▶ Low maintenance
- ▶ Simplified design
- ▶ Energy efficient
- ▶ Draft-free or precisely controlled air dispersion
- ▶ No risk of condensation
- ▶ Less drafts reduce airborne dust and dirt
- ▶ Customization for various types of applications

**Improved Air Distribution.** In open ceiling architecture, traditional metal duct systems discharge air through side mounted metal diffusers. The air is directed to specific zones resulting in less efficient mixing of air in the occupied space and often causes drafting and

hot or cold spots. With a DuctSox System, the air is discharged more uniformly along the entire length, providing consistent and uniform air dispersion in the occupied space.

**Lower Cost.** The cost of a DuctSox System is 20% to 80% less than metal. The cost savings of non-condensating air porous DuctSox are even more when compared to insulated metal duct or premium materials such as stainless steel or aluminum. There is also considerable savings in the labor time required to install DuctSox versus a comparable metal system. It may require up to 10 times more labor (man hours) to install metal and the savings increase dramatically with diameter.

**Low Maintenance.** Cleaning metal ductwork can be expensive. These costs are often overlooked. A dirty duct (interior) can be a leading contributor to sick building syndrome, human health problems, and possible contamination. DuctSox Systems are designed with zippered sections for ease of handling. Depending on the type of environment, a DuctSox System can be easily removed and laundered in a commercial washing machine.

**Simplified Design.** Since a DuctSox System provides superior air mixing within the space, often the layout can be much simpler than a metal system. This means less ductwork! Because the entire DuctSox System is a diffuser and air is dispersed down the entire length of duct, air can be supplied to the occupied space in a more efficient pattern. In addition, DuctSox Systems may be designed with fittings similar to metal ductwork with unlimited customization to match any application requirements.

**Energy Efficient.** A DuctSox System is also more energy efficient than a traditional metal duct system. A 10-month study performed by the Mechanical Engineering Department at Iowa State University, "Thermal Comparison Between Ceiling Diffusers and Fabric Ductwork Diffusers for Green Buildings" proved fabric duct brings the temperature in the space to set point 24.6% quicker and more uniformly than traditional metal duct/diffuser systems.

**Customization.** DuctSox also offers a variety of solutions for specific application requirements. Options include products with an active antimicrobial agent that inhibits bacteria and mold growth, air porous fabrics (air passing through the fabric surface) that help eliminate the risk of condensation, electro static dissipative yarns that dissipate static buildup in electrically sensitive environments, and an internal framework tensioning system (SkeleCore) that prohibits the ductwork from sagging when there is no air in the system. All of these options offer a wide range of flexibility when designing an air distribution system to meet specific application requirements.

With increased efficiency of air delivery, lower installation costs, ease of maintenance, simplified design, and a variety of options to meet the most demanding applications, DuctSox are clearly the best choice when designing an air distribution system for your facility.



## Fabric

SPECIFICATION	350SX	DURATEX	VERONA	MICROBE-X
Group	Economy	Commercial	Commercial	Commercial Food Processing
Diameters	200mm to 914mm 8" to 36"	200mm to 2000mm 8" to 78"	200mm to 2000mm 8" to 78"	200mm to 2000mm 8" to 78"
Type	Non-Porous	Non-Porous	Porous	Porous
Shape	Cylindrical	Cylindrical, D-Shape, Quarter-Round	Cylindrical, D-Shape, Quarter-Round	Cylindrical, D-Shape, Quarter-Round
Air Velocity	High	High/Medium	High/Medium	Low
Air Dispersion	Orifice	Orifice, Nozzle, Linear Vent	Orifice, Nozzle, Linear Vent	Through Fabric Surface/Linear Vents
Launderable	Yes	Yes	Yes	Yes
Static Pressure	125 Pa Standard/Range 94 to 1870 Pa 0.50" Standard/Range 1/4" to 7.50"	125 Pa Standard/Range 94 to 1870 Pa 0.50" Standard/Range 1/4" to 7.50"	125 Pa Standard/Range 94 to 1870 Pa 0.50" Standard/Range 1/4" to 7.50"	125 Pa Standard/Range 94 to 1870 Pa 0.50" Standard/Range 1/4" to 7.50"
Porosity	0	0	10.2l/s/m <sup>2</sup> @ 125Pa - 2 CFM/ft <sup>2</sup> @ 0.50" w.g. Custom from 0.3 to 50.0 CFM/ft <sup>2</sup>	0.5/66/147l/s/m <sup>2</sup> @ 125Pa 6/13/29 CFM/ft <sup>2</sup> @ 0.50"
Weight	186g/m <sup>2</sup> 5.5 oz/yd <sup>2</sup>	186g/m <sup>2</sup> 5.5 oz/yd <sup>2</sup>	210g/m <sup>2</sup> 6.2 oz/yd <sup>2</sup>	234g/m <sup>2</sup> 6.9 oz/yd <sup>2</sup>
Fire Retardant	Inherent Fire Retardant Independent Laboratory Certified	Inherent Fire Retardant Independent Laboratory Certified	Inherent Fire Retardant Independent Laboratory Certified	Inherent Fire Retardant Independent Laboratory Certified
Approvals	UL 2518 ICC AC167	UL 2518 ICC AC167	UL 2518/ICC AC167 Bs 5867/Gb8624/AS/NZS1530.3/DIN	UL 2518 ICC AC167
Antimicrobial	Passes UL Low Mold Growth & Humidity Test	Passes UL Low Mold Growth & Humidity Test	Passes UL Low Mold Growth & Humidity Test	Yes Permanent Antimicrobial
Suspension	Cable	Cable, Track, Surface, Hoops, Hangers, PT, FTS	Cable, Track, Surface, Hoops, Hangers, PT, FTS	Cable, Track, Surface, Hoops, Hangers, PT, FTS
Colors	Black, Silver, White, Tan	Black, Silver, White, Tan, Blue, Custom	Black, Silver, White, Tan, Blue, Red, Green, Custom	White
Warranty	1 Year See Website for Details & Terms	Up to 15 Years See Website for Details & Terms	Up to 15 Years See Website for Details & Terms	1 Year See Website for Details & Terms

## Air Dispersion

HIGH VELOCITY  
ORIFICES



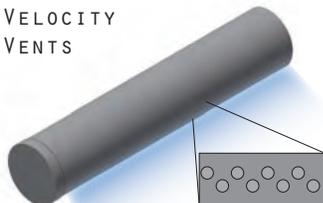
HIGH VELOCITY  
ADJUSTABLE NOZZLE



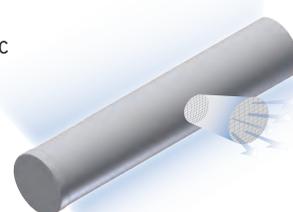
MEDIUM VELOCITY  
FIXED NOZZLE



MEDIUM VELOCITY  
LINEAR VENTS



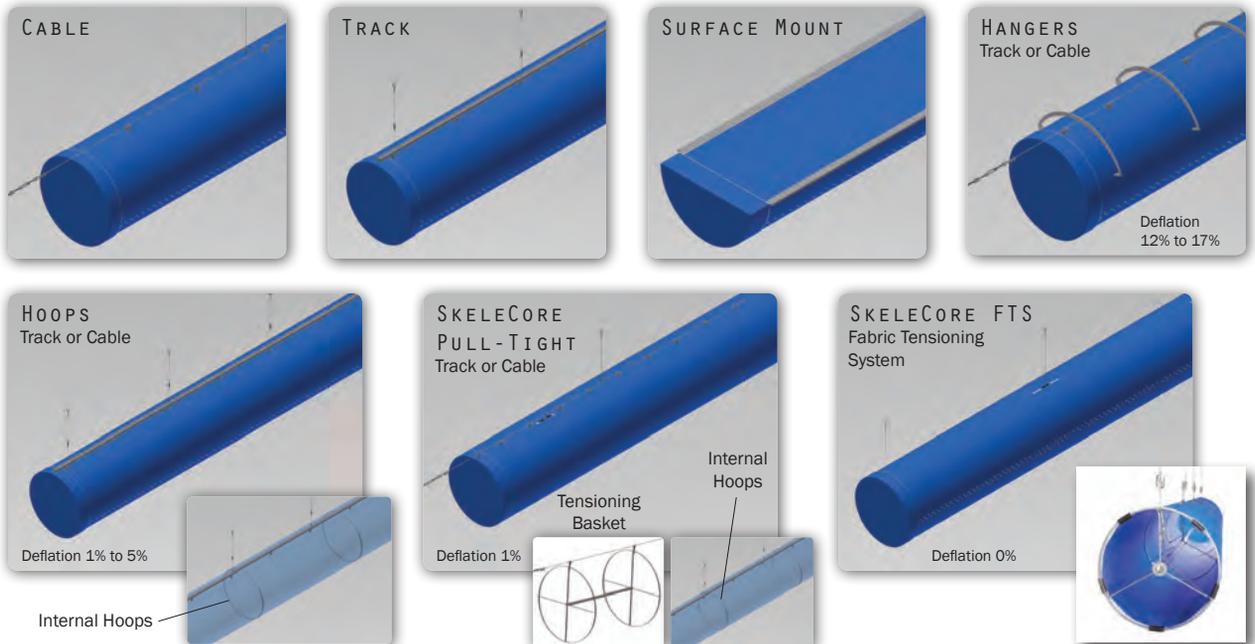
LOW VELOCITY  
THROUGH FABRIC



# Fabric

SPECIFICATION	TUFTEX	SEDONA - XM	STAT - X	Rx
Group	Premium	Premium Antimicrobial	Specialty Static Dissipative	Specialty Critical Environments
Diameters	200mm to 2000mm 8" to 78"	200mm to 2000mm 8" to 78"	200mm to 2000mm 8" to 78"	Various Consult Factory
Type	Non-Porous	Antimicrobial, Porous	Porous	Porous
Shape	Cylindrical, D-Shape, Quarter-Round	Cylindrical, D-Shape, Quarter-Round	Cylindrical, D-Shape, Quarter-Round	Cylindrical, D-Shape, Quarter-Round, Shapes for Lay-In Ceilings
Air Velocity	High/Medium	High/Medium	High/Medium	Low
Air Dispersion	Orifice, Nozzle, Linear Vent	Orifice, Nozzle, Linear Vent	Orifice, Nozzle, Linear Vent	Through Fabric Surface
Launderable	Yes	Yes	Yes	Yes
Static Pressure	125 Pa Standard/Range 94 to 1870 Pa 0.50" Standard/Range 1/4" to 7.50"	125 Pa Standard/Range 94 to 1870 Pa 0.50" Standard/Range 1/4" to 7.50"	125 Pa Standard/Range 94 to 1870 Pa 0.50" Standard/Range 1/4" to 7.50"	125 Pa Standard/Range 94 to 1870 Pa 0.50" Standard/Range 1/4" to 7.50"
Porosity	0	10.2l/s/m <sup>2</sup> @ 125Pa- 2CFM/ft <sup>2</sup> @ 0.50" w.g. Custom from 0.3 to 50.0 CFM/ft <sup>2</sup>	10.2l/s/m <sup>2</sup> @ 125Pa 2 CFM/ft <sup>2</sup> @ 0.50" w.g.	Specialty Consult Factory
Weight	278g/m <sup>2</sup> 8.2 oz/yd <sup>2</sup>	231g/m <sup>2</sup> 6.8 oz/yd <sup>2</sup>	98g/m <sup>2</sup> 2.9 oz/yd <sup>2</sup>	Specialty Consult Factory
Fire Retardant	Inherent Fire Retardant Independent Laboratory Certified	Inherent Fire Retardant Independent Laboratory Certified	Inherent Fire Retardant Independent Laboratory Certified	Inherent Fire Retardant Independent Laboratory Certified
Approvals	UL 2518 ICC AC167	UL 2518 ICC AC167	UL 2518 ICC AC167	UL 2518 ICC AC167
Antimicrobial	Passes UL Low Mold Growth & Humidity Test	Yes Permanent Antimicrobial	Yes Permanent Antimicrobial	Yes Permanent Antimicrobial
Suspension	Cable, Track, Surface, Hoops, Hangers, PT, FTS	Cable, Track, Surface, Hoops, Hangers, PT, FTS	Cable, Track, Surface, Hoops, Hangers, PT, FTS	Specialty Consult Factory
Colors	Black, Silver, White, Tan, Blue, Red, Green, Custom	Black, Silver, White, Tan, Blue, Red, Green, Custom	White, Light Blue	White
Warranty	Up to 20 Years See Website for Details & Terms	Up to 20 Years See Website for Details & Terms	5 Years See Website for Details & Terms	1 Year See Website for Details & Terms

## Suspension Systems





- 1 Airports
- 2 Grocery Stores
- 3 Manufacturing
- 4 Critical Environments
- 5 Municipal
- 6 Education
- 7 Retail
- 8 Aircraft Maintenance
- 9 Food Processing

FOR MORE PHOTOS AND  
APPLICATION TYPES, GO  
TO OUR PHOTO GALLERY.

[WWW.DUCTSOX.COM](http://WWW.DUCTSOX.COM)

DuctSox is the leader in the industry through our commitment to quality, service, and innovation. This allows us to expand our product offering to include textile air dispersion solutions for critical environments, commercial food preparation areas, and underfloor applications.



## LabSOX™

Air Dispersion For Critical Environments

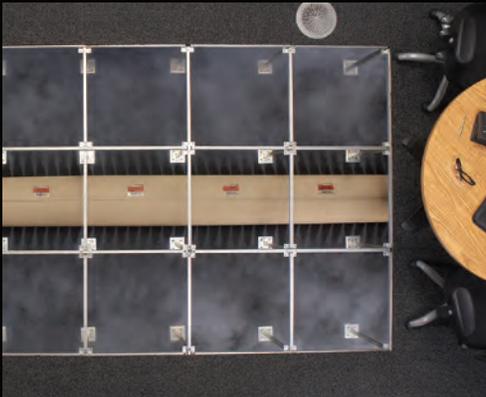
Designed specifically for critical environments, LabSox products combine airflow design with specialized permeable fabrics and precisely shaped panels.

- ▶ Uniform, low velocity, radially diverging air patterns with minimum turbulence
- ▶ Can be easily retrofitted to resolve airflow issues in existing facilities
- ▶ Fabric faced products offer noise levels at least 10 NC quieter than metal
- ▶ Highly permeable, antimicrobial treated fabrics
- ▶ Modular D-Fuser available in MetalPan or All-Fabric models
- ▶ Also available in Round, D-Shape, or Quarter-Round

## KitchenSOX™

KitchenSox offer better air dispersion alternatives for food preparation environments.

- ▶ Airflow through textile eliminates drafts and condensation
- ▶ Introduce more supply airflow near hood while maintaining capture
- ▶ Reduces dirt deposits on diffuser and adjacent ceiling tiles
- ▶ Antimicrobial treated, highly porous textile offers secondary filtration
- ▶ Fabric face can be easily removed for laundering
- ▶ Modular D-Fuser available in MetalPan or All-Fabric models
- ▶ Also available in Round, D-Shape, or Quarter-Round



## under floor SOX™

Plenum Air Dispersion Systems

UnderFloorSox (UFSox) are a specialty line of DuctSox textile products designed to distribute and disperse air within the plenum for Underfloor Air Distribution (UFAD) Systems. Air dispersion through engineered venting and variable endcaps improve thermal distribution of supply air within the plenum.

- ▶ Lightweight, easy to ship, handle, and install
- ▶ Modular, zip-together sections and fittings
- ▶ Easily reconfigured for future changes
- ▶ Placed on the floor, secured with retention cables
- ▶ Delivers cool air to perimeter zones reducing effects of thermal decay
- ▶ Low noise. Venting in fabric reduces noise generation within the plenum
- ▶ Uniform dispersion ensures balanced pressurization of the plenum
- ▶ Air porous fabrics eliminate ductwork condensation and reduce temperature gain over extended distances to perimeter zones

For more information on DuctSox Textile Air Dispersion Products, please visit us at [www.ductsox.com](http://www.ductsox.com).

Products may be covered by one or more of the following patents: 6565430, 6558250, 5769708, 6425417, 6626754, 6280320, 6960130, 6958011, 6953396, 8434526, 8676545, 8808075, and 8844578. Other patents pending.

A Subsidiary of Rite-Hite Holding Corporation

# DUCTSOX®

I N T E R N A T I O N A L

9866 Kapp Court, Peosta, IA 52068

Ph: 563-588-5300 • Toll Free: 866-382-8769 • Fax: 563-588-5330

[www.ductsox.com](http://www.ductsox.com)

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