Fabric Air Dispersion Products
Leading the industry through innovation, quality and service for over 40 years.
DuctSox® fabric air dispersion products are an innovative and cost effective alternative to traditional metal ductwork providing precise and efficient heating, cooling, or ventilating for virtually any building application.

From coffee shops to airplane hangars our full range of products are custom designed and configured to fit ANY space and are ideal for a variety of environments...

- Cleanrooms
- Convention Centers
- Data Centers
- Education
- Fitness Centers
- Food Processing
- Grow/Agriculture
- Gymnasiums
- Industrial/Manufacturing
- Kitchens
- Laboratories
- Office Buildings
- Pools/Water Parks
- Retail
- Stadiums/Arenas
- Warehousing
Why Fabric?

Traditional metal ductwork is heavy, rigid and can only disperse air through spaced out diffusers restricting airflow to localized areas.

Fabric systems are lightweight, flexible and breathable which allows for uniform and precise air dispersion making it comfortable, quiet and more efficient than metal ductwork.

**ECONOMICS**
- Highly efficient
- Lower cost
- Precise airflow control
- Lightweight for easy shipping and installation

**PERFORMANCE**
- Eliminate drafts with uniform, comfortable air dispersion
- Condensation free
- Quiet
- Hygienic and ideal for clean environments
- Performance guarantee

**AESTHETICS**
- Attractive standard color selection
- Clean, minimal design
- Personalized and custom graphic options
- Flexible and contours to any space

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Our Family of Product Solutions

Innovative and custom engineered air dispersion products for many environments.

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**Traditional DuctSox**
- Variety of fabrics for appearance and function
- Range of diameters available to meet your application needs
- Flexible, customizable and cost-effective

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**Critical Environments**
- Specialized designs for laboratories, clean rooms, data centers and growing facilities
- Resolves draft issues that affect hood performance
- Solves challenges like caustic environment and airborne pollutants
- Provides targeted, uniform velocities to allow for maximum efficiency of data center equipment
- Custom solutions to match the needs of each critical plant growing stage

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**Underfloor Air Distribution**
- Reduced floor-to-floor building height
- Improved indoor air quality
- Improved temperature diffusion and comfort

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DuctSox products have been accepted within key industry organizations such as ASHRAE, Underwriters Laboratories (U.S. & Canada), International Code Council, and many building authorities throughout the world. More information can be found at www.ductsox.com
DuctSox Advantages

Each DuctSox system includes five key elements that can be customized to meet the exact needs of each application improving air quality and efficiency over comparable metal systems.

1. Shape/Suspension
2. Layout/Fittings
3. Air Dispersion
4. Fabric
5. Options
Shape

Metal ductwork systems don’t lend themselves to much creativity. If you’re planning to construct a new building with a modern aesthetic or retrofitting an existing building with architectural limitations, using metal ductwork can become quite challenging and costly. DuctSox fabrics can conform to any space and for added customization are available in four shape configurations: cylindrical, half-round, quarter-round and oval.

Round
Traditional option perfect for both open and finished architecture with a wide variety of customizable options.

Half-Round
Surface mount option for applications with finished ceilings or specialty airflow requirements.

Quarter-Round
Surface mount option with finished ceilings or specialty airflow requirements and space restrictions.

Oval
Ideal for applications with a low head room or when obstructions, such as machinery that cannot be moved, are in the path of the ductwork.
Suspension

Whether horizontal, vertical, or angled, cylindrical DuctSox are available in a variety of suspension and retention systems. For applications where the DuctSox will be mounted against a flat surface (wall, ceiling, or both), the surface mount products feature flexibility for shape, configuration, and inlet position (end, top, back).

DuctSox systems are lightweight and easy to install lowering overall installation costs.

**INSTALL TIME** (HOURS): Fabric vs. Metal

87% LESS INSTALL TIME

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<th>Traditional</th>
<th>Suspension Hardware</th>
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<tbody>
<tr>
<td>1 Row</td>
<td>Cable</td>
<td>Track</td>
</tr>
<tr>
<td>2 Row</td>
<td>Half-Round</td>
<td>Quarter-Round</td>
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<td>3 Row</td>
<td>Hoops</td>
<td>Hangers</td>
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*Installation time (hours of labor) based on a single length of 100 ft (30,480 mm) of 24 in (610 mm) diameter DuctSox compared to an uninsulated spiral metal duct and diffusers.

**WEIGHT**: Fabric vs. Metal

90% LESS WEIGHT

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<th>Traditional</th>
<th>Suspension Hardware</th>
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<tr>
<td>1 Row</td>
<td>250lbs</td>
<td>2336lbs</td>
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<tr>
<td>2 Row</td>
<td>250lbs</td>
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<tr>
<td>3 Row</td>
<td>250lbs</td>
<td>2336lbs</td>
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*Weight (lbs) based on a single length of 100 ft (30,480 mm) of 48 in (1219 mm) diameter DuctSox compared to an uninsulated spiral metal duct and diffusers.

SkeleCore Internal Framework System

The only fabric air dispersion system that provides 360 degrees of fabric tensioning! SkeleCore utilizes an internal framework system to provide aesthetic enhancement and improved performance characteristics while eliminating noise, motion sagging and wrinkles. Contact us now for more “core” reasons to incorporate SkeleCore into your next DuctSox system.
Layout

With the entire DuctSox system acting as a diffuser, air dispersion and distribution is combined allowing simple and efficient layouts that typically cost 20-80% less and outperform comparable metal duct systems.

Fittings

Not every application is a straight line of DuctSox. To accommodate this, we offer a variety of standard fittings. We also offer custom fitting configurations.

RADIUS ELBOWS

- 30°
- 45°
- 60°
- 90°

*TOther angle degrees can be fabricated to meet each application’s needs

TRANSITIONS

- Flat-on-Top
- Concentric
- Flat-on-Bottom
- Round to D-Shape

T’S

- Flat-on-Top
- Concentric
- Flat-on-Bottom

CROSSES

- Flat-on-Top
- Concentric
- Flat-on-Bottom
Air Dispersion

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 efficiently discharged along the entire length, providing consistent and uniform air dispersion in the occupied space.

Air-Porous Fabric

Supply air is delivered exclusively through porous fabric.

- Flow rate through fabric controlled by weave and pressure from 1 - 200 FPM (0.005 - 1.016 m/s).

Ideal for cooling only; food processing, displacement, or critical environments.

Linear Vents

Delivers airflow through precision cut orifice patterns. Airflow throw up to 90 ft. (27,432 mm).

- Vent size referenced by airflow per linear foot
- Unlimited flexibility in designing vent size and location for optimum airflow control.

Most common method for heating and cooling; high entrainment from outlets provide uniform temperature and fewer drafts, creating a comfortable environment.
Nozzles
Provides jet-type airflow throw up to 60ft. (18,288mm).
• Nozzle type, location, and quantity based on airflow requirements
• Available in a variety of colors

Orifices
Provides airflow throw by orifice size and pressure, up to 150ft. (45,720mm).
• Orifice sizes: ½ in. - 5 in. (12.7 mm - 127 mm) diameter
• SG outlets 2 in. or 3 in. (51 mm or 76 mm) diameter
• Orifice size and orientation based on required air throw distance

For heating and cooling, orifices are ideal for areas requiring extended and precise throw such as recreation, arenas, convention centers, retail, industrial, warehouses, and many other applications where spot cooling is needed.
Fabric

Maintenance

DuctSox systems have been designed to reduce or eliminate required maintenance. Cleaning metal ductwork systems can be expensive, and these costs are often overlooked. Neglected interior air systems can be a leading contributor to sick building syndrome, human health problems, and possible contamination. DuctSox fabrics come with the following distinct maintenance advantages over metal systems:

- Fabric options available feature an active antimicrobial agent inhibiting bacteria growth
- No Condensation / No Rust
- Zippered sections for ease of handling and removing fabric
- Lightweight, simple and easy installation and removal
- Can be easily removed and laundered in a commercial washing machine

Customization

Metal ductwork systems will scratch, dent and over time their paint will peel requiring maintenance to repaint. DuctSox fabrics are forgiving meaning they will not scratch or dent. Unlike metal ductwork, DuctSox fabric comes in a variety of standard colors, patterns, and custom colors direct from the factory and can be personalized with company logos, mascots, taglines, and patterns.
Adjustable Flow Device (AFD)

Airflow control is critical in HVAC air dispersion. DuctSox’s patented zip-in Adjustable Flow Device (AFD) is an added option that offers variable resistance to balance static regain, balance airflow to branches, reduce turbulence, and reduce abrupt start-ups.

AFDs are preset from the factory and come standard with Sedona-Xm and TufTex systems, but are also an available option with other DuctSox fabrics. All AFDs can be custom adjusted in the field to meet system performance requirements.

Silencer™

Fabric air dispersion systems can be designed to be quiet, but, noise entering the system from air handling units, volume control dampers, or fan-powered boxes, can create an uncomfortably noisy environment. The DuctSox Silencer™ is a fabric sound attenuator that was developed to address just that—noise from the mechanical equipment.

The Silencer is installed in the occupied space, offering an aesthetically pleasing appearance that can be customized to match your DuctSox system’s fabric type and color.
Project Gallery

Data Centers

Grocery Stores

Sports Arena

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

To find a DuctSox representative in your area go to www.ductsox.com/reps